

AASP African American Studies Fall 2019

AASP100 Introduction to African American Studies

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH, D General Education: DSHS, DVUP

Significant aspects of the history of African Americans with particular emphasis on the evolution and development of black communities from slavery to the present. Interdisciplinary introduction to social, political, legal and economic roots of contemporary problems faced by blacks in the United States with applications to the lives of other racial and ethnic minorities in the Americas and in other societies.

0101	Shane Walsh	Seats (Total: 35)
	MWF 10:00am - 10:50am	WDS 1114
0201	Shane Walsh	Seats (Total: 35)
	MWF 12:00pm - 12:50pm	TYD 1101
0301	Jonathan England	Seats (Total: 35)
	TuTh 9:30am - 10:45am	TYD 2108
0401	Jonathan England	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	HBK 0109
0501	Jason Nichols	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	KEY 1117
0601	Jason Nichols	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	PLS 1117

AASP100H Introduction to African American Studies

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH, D General Education: DSHS, DVUP

Significant aspects of the history of African Americans with particular emphasis on the evolution and development of black communities from slavery to the present. Interdisciplinary introduction to social, political, legal and economic roots of contemporary problems faced by blacks in the United States with applications to the lives of other racial and ethnic minorities in the Americas and in other societies.

0101	Jonathan England	Seats (Total: 5)
	TuTh 12:30pm - 1:45pm	HBK 0109

AASP101**Public Policy and the Black Community**

Credits: 3 Grading Method: Regular, Pass-Fail CORE: SB General Education: DSHS

Formerly: AASP300.

The impact of public policies on the black community and the role of the policy process in affecting the social, economic and political well-being of minorities. Particular attention given to the post-1960 to present era.

0101	Jonathan England	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	SQH 1103

AASP200**African Civilization**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO General Education: DSHU

A survey of African civilizations from 4500 B.C. to present. Analysis of traditional social systems. Discussion of the impact of European colonization on these civilizations. Analysis of the influence of traditional African social systems on modern African institutions as well as discussion of contemporary processes of Africanization.

0101	George Kintiba	Seats (Total: 40)
	MW 12:00pm - 1:15pm	ARC 1103
FC01	George Kintiba	Seats (Total: 22)
	TuTh 7:30pm - 8:45pm	KEY 0100
<i>Restricted to students in Freshmen Connection.</i>		

AASP202**Black Culture in the United States**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH, D General Education: DSHS, DVUP

The course examines important aspects of African American life and thought which are reflected in African American literature, drama, music and art. Beginning with the cultural heritage of slavery, the course surveys the changing modes of black creative expression from the 19th-century to the present.

0101	Renina Jarmon	Seats (Total: 35)
	MWF 11:00am - 11:50am	TYD 1101
0102	Renina Jarmon	Seats (Total: 35)
	MWF 1:00pm - 1:50pm	SQH 1107

0103	Robert Choflet	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	ARC 1105
0104	Robert Choflet	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	SKN 1115

AASP202H Black Culture in the United States

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH, D General Education: DSHS, DVUP

The course examines important aspects of African American life and thought which are reflected in African American literature, drama, music and art. Beginning with the cultural heritage of slavery, the course surveys the changing modes of black creative expression from the 19th-century to the present.

0103	Robert Choflet	Seats (Total: 8)
	TuTh 11:00am - 12:15pm	ARC 1105

AASP210 Intro to Research Design and Analysis in African American Studies

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Introduces students to quantitative and qualitative research methods used in social science with a focus on Black populations and African American Studies Research. Uses practical exercises, such as class surveys and mock focus groups, to examine fundamental concepts of the research process from conceptualization of research questions to interpretation of data and research articles. The course is designed for undergraduate students with little or no background knowledge in social science research methods.

0101	Caryn Bell	Seats (Total: 20)
	MW 10:00am - 11:15am	KEY 0124

AASP274 Creative Writing Through The Eyes of African Americans: A Beginning Workshop

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Restriction: Must not have completed ENGL271, ENGL274, ENGL294, or AASP274. Cross-listed with ENGL274. Credit only granted for: ENGL274 or AASP274.

Introduction to theory and practice of writing fiction, drama and poetry, with an emphasis on African American literary models. Critical reading, exercises and workshop discussions with continual reference to modeling, drafting, and revising as necessary stages in a creative process.

0101	Dorothy Phaire	Seats (Total: 20)
	TuTh 9:30am - 10:45am	NCC 0120

AASP297 Research Methods in African American Studies

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: AASP101 or AASP202. Restriction: Must be in African American Studies program. Credit only granted for: AASP297 or AASP299R. Formerly: AASP299R.

Introduces African American Studies majors to the basic research skills, methodologies, sources, and repositories for studying African Diaspora. Students will be required to select a research topic, write a research proposal, develop an annotated bibliography, and in the process will be prepared for completing their senior thesis or other significant writing projects necessary to fulfill the requirements of the major.

0101	Sharon Harley	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	TLF 1102

AASP298C African-American History to 1865

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: SH, D General Education: DVUP

Cross-listed with: HIST254. Credit only granted for: HIST254 or AASP298C.

Survey of the principal developments in the history and culture of the peoples of African descent in colonial North America and the United States to 1865. Examines the African past, the Atlantic slave trade, variation in slavery, the growth of free black communities, the transformations of families and cultural forms, and patterns of resistance.

Cross-listed with HIST254. Credit will be granted for AASP298C or HIST 254.

0101	Christopher Bonner	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	KEY 0116

AASP298I Special Topics in African American Studies; Introduction to Black Women's Studies

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An introductory multi-disciplinary and inter-disciplinary educational experience to explore issues relevant to black life, cultural experiences, and political, economic, and artistic development.

Cross-listed with AASP298I. Credit only granted for WMST298A or AASP298I .

0101	Elsa Barkley Brown	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	TYD 0111

AASP298L African-American Literature and Culture

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL, D General Education: DSHU, DVUP

Cross-listed with: ENGL234. Credit only granted for: ENGL234 or AASP298L.

An exploration of the stories black authors tell about themselves, their communities, and the nation as informed by time and place, gender, sexuality, and class. African American perspective themes such as art, childhood, sexuality, marriage, alienation and mortality, as well as representations of slavery, Reconstruction, racial violence and the Nadir, legalized racism and segregation, black patriotism and black ex-patriots, the optimism of integration, and the prospects of a post-racial America.

Cross-listed with ENGL234. Credit granted for AASP298L or ENGL234.

0201	Steve Beaulieu	Seats (Total: 30)
	MWF 12:00pm - 12:50pm	KEY 0125

AASP298M Special Topics in African American Studies; Martin Luther King, Jr.

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An introductory multi-disciplinary and inter-disciplinary educational experience to explore issues relevant to black life, cultural experiences, and political, economic, and artistic development.

Jointly offered with HIST189D and AMST298D. Credit granted for HIST189D, AASP298M, or AMST298D.

0101	Quincy Mills	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	TLF 2100

AASP299T Selected Topics in African American Studies; Introduction to Twi

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

An introductory multi-disciplinary academic exploration of the cultural, political, and economic issues relevant to Africans and African-Americans.

This is a language course designed to provide basic communicative competence in oral Twi for beginners. This is part of the STIC (student initiated courses) program and will be taught by undergraduates under the supervision of a faculty advisor.

0101	George Kintiba	Seats (Total: 25)
	W 2:00pm - 2:50pm	BPS 1232

AASP301 Applied Policy Analysis and the Black Community

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: AASP101; and (ECON201 or ECON200). Recommended: Completion of one semester of statistics is recommended.

Development and application of the tools needed for examining the effectiveness of alternative policy options confronting minority communities. Review policy research methods used in forming and evaluating policies. Examination of the policy process.

0101	Ricco Hall	Seats (Total: 24)
	W 6:30pm - 9:00pm	TLF 1101

AASP310 African Slave Trade

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: AASP202 or AASP100; or permission of BSOS-African American Studies department. Formerly: AASP311.

The relationship of the slave trade of Africans to the development of British capitalism and its industrial revolution; and to the economic and social development of the Americas.

0101	George Kintiba	Seats (Total: 35)
	W 2:00pm - 4:30pm	SYM 0215

AASP386 Experiential Learning

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Restriction: Permission of BSOS-African American Studies department; and junior standing or higher.

0101	Marshal Washington	Seats (Total: 10)
	Th 10:00am - 12:30pm	TLF B0106

AASP395 Fundamentals of Quantitative Research in Socio-Cultural Perspective

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in African American Studies program; and junior standing or higher.

Introduction to quantitative methods for African American Studies majors in the cultural and social analysis concentration. Basics of survey design and experimental design and data analysis and use of statistical software programs.

0101	Caryn Bell	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	WDS 1131

AASP396 Independent Study Non-Thesis Option

Credits: 3 Grading Method: Regular

Prerequisite: AASP386 and AASP297. Restriction: Must be in African American Studies program. Credit only granted for: AASP396 or AASP397.

A research seminar that allows African American Studies majors to complete an independent study research project in lieu of completing the AASP397: Senior Thesis. Students will examine various concepts of race, gender, labor and ethnicity in the seminar lecture component to be applied toward their specific research projects.

0101	Angel Dunbar	Seats (Total: 10)
	W 3:00pm - 5:30pm	TLF 1102

AASP397 Senior Thesis

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of BSOS-African American Studies department.

Directed research in African American Studies resulting in the completion and defense of a senior thesis.

Contact department for information to register for this course.

AASP398E Selected Topics in the African Diaspora; The Black Power Movement

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Analysis of the historical experiences and cultures of Africans in the diaspora.

Cross-listed with HIST319N. Credit only granted for HIST319N or AASP398E . This course examines the ideologies, politics, economy, and culture of Black Power as a social movement for liberation.

0101	Quincy Mills	Seats (Total: 40)
	TuTh 9:30am - 10:45am	TYD 1132

AASP398P Selected Topics in the African Diaspora; African Studies: Intro to Pan-Africanism

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Analysis of the historical experiences and cultures of Africans in the diaspora.

0101	George Kintiba	Seats (Total: 35)
	M 2:00pm - 4:30pm	PHY 1219

AASP398Q Selected Topics in the African Diaspora; Black Baltimore in the Post Racial U.S: African American Urban Culture in the Age of Obama

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Analysis of the historical experiences and cultures of Africans in the diaspora.

0101	Robert Choflet	Seats (Total: 35)
	Th 4:00pm - 6:30pm	ASY 3203

AASP400 Directed Readings in African American Studies

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit DVUP

Prerequisite: AASP202 or AASP100.

The readings will be directed by the faculty of African American Studies. Topics to be covered will be chosen to meet the needs and interests of individual students.

Cross-listed with WMST498Y. Credit will be granted for one of the following: AASP400, AASP400H, or WMST498Y.

0101	Sharon Harley	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	TLF 1102

AASP400H Directed Readings in African American Studies

(Perm req)

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit DVUP

Prerequisite: AASP202 or AASP100.

The readings will be directed by the faculty of African American Studies. Topics to be covered will be chosen to meet the needs and interests of individual students.

For general honors students only. The readings will be directed by the faculty of African American Studies. Topics to be covered will be chosen to meet the needs and interests of individual students.

0101	Sharon Harley	Seats (Total: 5)
	TuTh 2:00pm - 3:15pm	TLF 1102

AASP401 Research Directions in African-American Studies

Credits: 3 Grading Method: Regular

Restriction: Must have earned a minimum of 90 credits; and must be major in African-American Studies.

Utilizing a pro seminar format, this course offers an overview of recent research on the experiences of African Americans and the African diaspora. The course will cover selective topics from research portfolios of department faculty related to the status of African Americans and the diaspora across a number of topics. Students will read recent original research studies and discuss with the authors both the theoretical underpinnings of the research, the methods and evaluate the interpretations. This course fulfills the capstone requirement for African American studies majors and certificate students by providing an opportunity to consolidate and integrate a range of ideas encountered in the curriculum.

0101	Oscar Barbarin	Seats (Total: 15)
	M 2:00pm - 4:30pm	TLF 1102

AASP402 Classic Readings in African American Studies

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: AASP202 or AASP100.

Classic readings of the social, economic and political status of blacks and other minorities in the United States and the Americas.

0101	Sangeetha Madhavan	Seats (Total: 15)
	TuTh 9:30am - 10:45am	TLF 1102

AASP478B Humanities Topics in African American Studies; African-American Literature: The Beginning to 1910

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Advanced studies in the humanities, often requiring prerequisites, focusing on the literary, artistic and philosophical contributions of Africans and African Americans.

Prerequisite: Two English courses in literature; or permission of ARHU-English department. Cross-listed with ENGL470. Credit granted for ENGL470 or AASP478B.

0101	Chad Infante	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	TWS 0214

AASP478K Humanities Topics in African American Studies; African-American Literature: 1945 to Present

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Advanced studies in the humanities, often requiring prerequisites, focusing on the literary, artistic and philosophical contributions of Africans and African Americans.

Cross-listed with ENGL472. Credit granted for ENGL472 or AASP478K.

Contact department for information to register for this course.

AASP498C Special Topics in Black Culture; 21st Century Black Feminisms

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Advanced study of the cultural and historical antecedents of contemporary African and African American society. Emphasis on the social, political, economic and behavioral factors affecting blacks and their communities. Topics vary.

Cross-listed with WMST428L. Credit only granted for AASP498C or WMST428L . Built loosely around Dr. Brittney Cooper's 2018 Black feminist manifestos to Eloquent Rage this course looks at black women's anger as a generative force for social change. Through reading Cooper's book and the intertextual black feminists texts that inspired it, this course will explore black women's sexuality and family life, black popular culture, black women's politics, black women's bodily autonomy, and the simmering rage which undergirds many black women's experiences in the United States.

0101	Sydney Lewis	Seats (Total: 30)
	Th 4:00pm - 6:30pm	JMZ 0103

AASP498J Special Topics in Black Culture; Racial Socialization of Children and Adolescents: Theory, Research and Practice

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Advanced study of the cultural and historical antecedents of contemporary African and African American society. Emphasis on the social, political, economic and behavioral factors affecting blacks and their communities. Topics vary.

0101	Angel Dunbar	Seats (Total: 35)
	TuTh 9:30am - 10:45am	VMH 1207

AASP498O Special Topics in Black Culture; African American and Latino Social, Cultural and Political Relations: 1940 to Present

Credits: 3 Grading Method: Regular

Advanced study of the cultural and historical antecedents of contemporary African and African American society. Emphasis on the social, political, economic and behavioral factors affecting blacks and their communities. Topics vary.

Cross-listed with USLT498E. Credit granted for AASP498O or USLT498E.

0101	Jason Nichols	Seats (Total: 35)
	W 4:00pm - 6:30pm	TYD 1118

AASP498Y Special Topics in Black Culture; Black Queer Studies

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Advanced study of the cultural and historical antecedents of contemporary African and African American society. Emphasis on the social, political, economic and behavioral factors affecting blacks and their communities. Topics vary.

Cross-listed with LGBT448L. Credit granted for AASP498Y or LGBT448L.

0101	Sydney Lewis	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	SKN 1115

AASP499C Advanced Topics in Public Policy and the Black Community; Race and Reproduction

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Examination of specific areas of policy development and evaluation in black and other communities. Application of advanced tools of policy analysis, especially quantitative, statistical and micro-economic analysis.

Cross-listed with AMST498E, SOCY498F, SOCY699B and WMST428C. Credit only granted for AASP499C, AMST498E, SOCY498F, SOCY699B or WMST428C.

0101	Sangeetha Madhavan	Seats (Total: 35)
	W 2:00pm - 4:30pm	ASY 3203

AASP499P Advanced Topics in Public Policy and the Black Community; African-American Politics from Frederick Douglass to Barack Obama

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Examination of specific areas of policy development and evaluation in black and other communities. Application of advanced tools of policy analysis, especially quantitative, statistical and micro-economic analysis.

Jointly offered with PLCY388B and GVPT368L. Credit only granted for AASP499P, GVPT368L, or PLCY388B.

0101	Jonathan England	Seats (Total: 30)
	Tu 3:30pm - 6:00pm	LEF 1201

AAST Asian American Studies Fall 2019

AAST200 Introduction to Asian American Studies

Credits: 3 Grading Method: Regular, CORE: SB, D General Education: DSHS,
Pass-Fail DVUP

Cross-listed with: AMST298C. Credit only granted for: AAST200 or AMST298C.

The aggregate experience of Asian Pacific Americans, from developments in the countries of origin to their contemporary issues. The histories of Asian Pacific American groups as well as culture, politics, the media, and stereotypes, viewed from an interdisciplinary perspective.

0101	Janelle Wong	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	SQH 1105

AAST201 Asian American History

Credits: 3 Grading Method: Regular, CORE: SH, D General Education: DSHS,
Pass-Fail, Audit DVUP

Cross-listed with HIST221. Credit only granted for: AAST201 or HIST221.

Introduction to the history of Asian Americans and Asians in the United States and the Americas and to the field of Asian American Studies, from an interdisciplinary perspective. Topics include theories of race and ethnicity; Asian migration and diaspora to the Americas; Asian American work and labor issues; gender, family, and communities; nationalism and nativism, and anti-Asian movements; Asian Americans in World War II, the Cold War, and the issues in the civil rights & post-civil rights era.

0101	Terry Park	Seats (Total: 60)
	TuTh 12:30pm - 1:45pm	TYD 2106

AAST222 Immigration and Ethnicity in America

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH, D General Education: DSHS, DVUP

Credit only granted for: AAST222 or HIST222.

The history of immigration and the development of diverse populations in the United States are examined. Topics include related political controversies, the social experiences of immigrants, ethnicity, generations, migration, inter-group relations, race and diversity in American culture.

0101	Julie Park	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	SQH 1101

AAST233 Introduction to Asian American Literature

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL, D General Education: DSHU, DVUP

Cross-listed with ENGL233. Credit only granted for: ENGL233 or AAST233.

A survey of Asian American literature with an emphasis on recurrent themes and historical context.

A survey of Asian American literature with an emphasis on recurrent themes and historical context.

0101	Katie Bramlett	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	TWS 1320

AAST298A Special Topics in Asian American Studies; Islam in/and America

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An introductory multidisciplinary and interdisciplinary educational experience to explore issues relevant to Asian American life, cultural experiences; and political, economic, and artistic development.

Cross-listed with HIST219V and AMST298I. Credit granted for AAST298A, HIST219V, or AMST298I. Islam in/and America examines the history and presence of Islam in the United States, and the construction and evolution of U.S. Muslim identity, community, and culture. A CIC CourseShare online course and part of the DISC initiative (Digital Islamic Studies Curriculum). The instructor is Sylvia Chan-Malik (American Studies/Women's and Gender Studies/Asian American Studies) at Rutgers University, but you enroll and receive credit for it at Maryland. You will also need to be entered into the University of Michigan Canvas course management system. The course meetst twice a week in real time using video conferencing technology. For more information about this course, including textbook information and instructions on enrolling, please contact Prof. Julie Park (juliepar@umd.edu).

0101	Jisun Min	Seats (Total: 10)
	TuTh 2:50pm - 4:10pm	SQH 2122

AAST378 Experiential Learning

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Field experience/internship in professional organizations and appropriate private and governmental agencies serving the Asian American community.

0101	Julie Park	Seats (Total: 2)
	Contact instructor or department for details.	

AAST388 Independent Research

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Directed, independent study in Asian American Studies resulting in the completion of an original research paper.

0101	Julie Park	Seats (Total: 2)
	Contact instructor or department for details.	
0201	Terry Park	Seats (Total: 2)
	Contact instructor or department for details.	

AAST398D Selected Topics in Asian American Studies; Filipino American History and Biography

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit DVUP

Study of a specific theme or issue involving the Asian America experience.

Cross-listed with AMST328J. Credit granted for AAST398D or AMST328J. Focus is placed on Filipino American experiences with an emphasis on identity, community building and organizing to influence public policy. We will cover pertinent events from the US and Philippine history in order to understand the impact of colonialism, migration, immigration and assimilation on Filipino Americans.

0101	Gemirald Daus	Seats (Total: 35)
	Tu 5:00pm - 7:30pm	SQH 1121

AAST398E Selected Topics in Asian American Studies; Growing Up Asian American: The Asian Immigrant Family and the Second Generation

Credits: 3 Grading Method: Regular, General Education: DVCC
Pass-Fail, Audit

Study of a specific theme or issue involving the Asian America experience.

Cross-listed with AMST328V and IMMR319G. Credit granted for AAST398E or AMST328V or IMMR319G. An interdisciplinary course examines the experiences of children of Asian immigrants in the U.S., focusing on intergenerational dynamics in the Asian immigrant family, their intersections with race, gender, class, sexuality, and religion, and how these shape second-generation Asian American life. Topics include identity and personhood, the model minority myth and education, work and leisure, language and communication, filiality and disownment, mental health and suicide.

0101	Jia Li Liu	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	SQH 1107

AAST398F Selected Topics in Asian American Studies; Introduction to Comparative Ethnic Studies

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Study of a specific theme or issue involving the Asian America experience.

Cross-listed with AMST328L. Credit granted for AAST398F or AMST328L. Introduces students to the study of race and ethnicity in the United States. Through readings, film clips, and presentations, we explore how the concept of race has developed and endured over time through institutions and policies. This course will also help students to better understand how race is associated with other forms of difference, such as class, gender and ethnicity. We identify and confront prevailing myths about race and ethnicity in the United States. Finally, we examine the ways in which contemporary issues reveal the dynamics of race and ethnicity.

0101	Janelle Wong	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	SQH 1107

AAST398J Selected Topics in Asian American Studies; New World Arrivals: Literature of Asian American Migration and Diaspora

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Study of a specific theme or issue involving the Asian America experience.

Cross-listed with ENGL349J. Credit only granted for ENGL349J or AAST398J .

0101	Edlie Wong	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	TWS 0236

AAST398M Selected Topics in Asian American Studies; Asian Americans and Media

Credits: 3 Grading Method: Regular, General Education: DSSP,
Pass-Fail, Audit DVUP

Study of a specific theme or issue involving the Asian America experience.

From yellow peril invaders to model minority allies, Asian Americans have crafted their own dynamic cultural expressions in a number of media from film, television, and music to fashion, sports, and food that reveal and contest the contradictions of the U.S. nation-state. Asian American culture also uniquely sits at the nexus of immigration flows and digital technologies, providing a transnational lens to view the US place in the world. This advanced course, then, will introduce students to the study and practice of Asian American culture as multiple, hybrid, and heterogeneous. It will do so through three sections: section one will introduce students to classical, cultural, and media concepts as well as relevant keywords outlined by Asian American Studies scholars; section two will review the work of Asian American cultural theorists; section three will focus on analyses of particular Asian American cultural productions. In doing so, students will gain an understanding of the shifting and interlocking tensions among the local, the national, and the global that form the cultural geographies of Asian America.

0101	Terry Park	Seats (Total: 55)
	TuTh 3:30pm - 4:45pm	SQH 1117

AAST498N Advanced Topics in Asian American Studies; South Asian American Intersectionalities and Solidarities

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Advanced study of the cultural and historical antecedents of contemporary Asian American society. Emphasis on the social, political, economic, and behavioral factors affecting Asian Americans and their communities.

South Asian Americans - identity, agency, and racial formation. This course will critically examine South Asian Americans through a transnational framework to understand how the community has experienced and created racial identity in the United States, navigated otherness from assimilation to solidarity, and leveraged U.S. political systems to both advance and destabilize domestic social justice movements.

0101	Lakshmi Sridaran	Seats (Total: 20)
	Th 5:00pm - 7:30pm	SQH 1101

AGNR Agriculture and Natural Resources Fall 2019

AGNR200 AGNR 2+2 Program Extended Orientation Seminar

Credits: 1 Grading Method: Regular

Prerequisite: Must be a first semester international student enrolled in the AGNR 2+2 Program.

Restriction: Must be a first year international student enrolled in the College of Agriculture and Natural Resources 2+2 Program. Additional information: It is strongly recommended that AGNR 2+2 students take AGNR 200 during the first semester at the University. One class meeting per week. This courses is initiated by International Programs and will be coordinated in conjunction with the College of AGNR.

Introduces AGNR 2+2 students to University and "American" life. Assists with their successful transition to the College and Agriculture and Natural Resources and the University of Maryland. Helps students to understand their place in AGNR at to learn about the resources available to them.

0101	Chenglin Zhu	Seats (Total: 25)
	M 4:00pm - 6:00pm	SYM 0209

AGNR301 Sustainability

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with PLCY301. Credit only granted for: AGNR301, PLCY301 or PUA301.

Designed for students whose academic majors would be enhanced by the complementary study of a widely shared but hard-to-operationalize aspiration: that present choices should preserve or improve future options rather than foreclose or degrade them. How should we understand sustainability? How might we achieve it? How would we know if we had achieved it? And how could sustainability activists of a rising generation lead by example?

0101	Caroline Boules	Seats (Total: 165)
	TuTh 12:30pm - 1:45pm	LEF 2205

AGNR388 Honors Thesis Research

(Perm req) Credits: 3-6 Grading Method: Regular

Undergraduate honors thesis research conducted under the direction of an AGNR faculty member in partial fulfillment of the requirements of the College of AGNR Honors Program. The thesis will be defended to a faculty committee.

0101	Evelyn Cooper	Seats (Total: 5)
Contact instructor or department for details.		

AGNR499
(Perm req)

Special Problems; Special Problems

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

0102	Evelyn Cooper	Seats (Total: 1)
Contact instructor or department for details.		

AMSC

Applied Mathematics & Scientific Computation

Fall 2019

AMSC460
(Perm req)

Computational Methods

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and 1 course with a minimum grade of C- from (MATH340, MATH241); and 1 course with a minimum grade of C- from (CMSC106, CMSC131); and minimum grade of C- in MATH246. Also offered as: CMSC460. Credit only granted for: AMSC460, CMSC460, AMSC466, or CMSC466.

Basic computational methods for interpolation, least squares, approximation, numerical quadrature, numerical solution of polynomial and transcendental equations, systems of linear equations and initial value problems for ordinary differential equations. Emphasis on methods and their computational properties rather than their analytic aspects. Intended primarily for students in the physical and engineering sciences.

0101	Akwum Onwunta	Seats (Total: 29)
	MWF 9:00am - 9:50am	EGR 0135
0201	Ruiwen Shu	Seats (Total: 29)
	TuTh 11:00am - 12:15pm	EGR 0135
0301	Stefan Doboszczak	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	MTH 0401
0401	Ruiwen Shu	Seats (Total: 29)
	TuTh 3:30pm - 4:45pm	EGR 0135

AMSC466

Introduction to Numerical Analysis I

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and 1 course with a minimum grade of C- from (MATH340, MATH241); and 1 course with a minimum grade of C- from (CMSC106, CMSC131); and minimum grade of C- in MATH410. Also offered as: CMSC466. Credit only granted for: AMSC460, CMSC460, AMSC466, or CMSC466.

Floating point computations, direct methods for linear systems, interpolation, solution of nonlinear equations.

[Click here for more course information.](#)

0101	Eitan Tadmor	Seats (Total: 32)
	TuTh 2:00pm - 3:15pm	CSI 4122

AMSC498A

Selected Topics in Applied Mathematics

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Topics in applied mathematics of special interest to advanced undergraduate students.

Contact department for information to register for this course.

AMSC660

Scientific Computing I

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: Must have knowledge of C or Fortran. And AMSC460 or CMSC460; or (CMSC466 or AMSC466); or (must have knowledge of basic numerical analysis (linear equations, nonlinear integration, interpolation); and permission of instructor). Cross-listed with CMSC660. Credit only granted for: AMSC660 or CMSC660.

Monte Carlo simulation, numerical linear algebra, nonlinear systems and continuation method, optimization, ordinary differential equations. Fundamental techniques in scientific computation with an introduction to the theory and software of each topic.

0101	Lise-Marie Imbert-Gerard	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	MTH B0421

AMSC662

Computer Organization and Programming for Scientific Computing

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: Must have knowledge of C or Fortran; and (AMSC460, AMSC466, CMSC460, or CMSC466). And (must have knowledge of basic numerical analysis (linear equations, nonlinear equations, integration, interpolation); and permission of instructor). Cross-listed with CMSC66 2. Credit only granted for: AMSC662 or CMSC662.

This course presents fundamental issues of computer hardware, software, parallel computing, and scientific data management for programming for scientific computation.

0101	Pierre-Emmanuel Jabin	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	MTH 1308

AMSC663 Advanced Scientific Computing I

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: CMSC660 or AMSC660; and (CMSC661 or AMSC661). Restriction: Permission of instructor. Cross-listed with CMSC663. Credit only granted for: AMSC663 or CMSC663.

In the sequence Advanced Scientific Computing I & Advanced Scientific Computing II, (AMSC663/CMSC663 and AMSC664/CMSC664, respectively) students work on a year-long individual project to develop software for a scientific task in a high performance computing environment. Lectures will be given on available computational environments, code development, implementation of parallel algorithms.

0101	Jacob Bedrossian, Maria Cameron	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	PHY 4222

AMSC666 Numerical Analysis I

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: CMSC466 or AMSC466; and MATH410. Cross-listed with CMSC66 6. Credit only granted for: AMSC666 or CMSC666.

Approximation theory, numerical solution of initial-value problems, iterative methods for linear systems, optimization.

[Click here for more course information.](#)

0101	Ricardo Nochetto	Seats (Total: 27)
	TuTh 5:00pm - 6:15pm	MTH 0303

AMSC673 Partial Differential Equations I

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH411; or students who have taken courses with comparable content may contact the department. Cross-listed with MATH67 3. Credit only granted for: AMSC673 or MATH673.

Analysis of boundary value problems for Laplace's equation, initial value problems for the heat and wave equations. Fundamental solutions, maximum principles, energy methods. First order nonlinear PDE, conservation laws. Characteristics, shock formation, weak solutions. Distributions, Fourier transform.

Offered fall only. Cross-listed with MATH673.

0101	Manoussos Grillakis	Seats (Total: 30)
	MWF 12:00pm - 12:50pm	MTH 0303

AMSC689 Research Interactions in Applied Mathematics and Scientific Computation

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

The students participate in a vertically integrated (undergraduate, graduate and/or postdoctoral, faculty) research group. Format varies, but includes regular meetings, readings and presentations of material. See graduate program's online syllabus or contact the graduate program director for more information.

Contact department for information to register for this course.

AMSC763 Advanced Linear Numerical Analysis

Credits: 3 Grading Method: Regular, Audit

Prerequisite: AMSC666 or CMSC666; or permission of instructor. Also offered as: CMSC763. Credit only granted for: AMSC600, AMSC763, CMSC760, or CMSC763. Formerly: AMSC600 and CMSC760.

Advanced topics in numerical linear algebra, such as dense eigenvalue problems, sparse elimination, iterative methods, and other topics.

0101	Howard Elman	Seats (Total: 30)
	MW 3:30pm - 4:45pm	CSI 1122

AMSC799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular, Satisfactory, Fail

Contact department for information to register for this course.

AMSC808A Advanced Topics in Applied Mathematics

Credits: 1-3 Grading Method: Regular,
Audit

Advanced topics of current interest.

Contact department for information to register for this course.

AMSC898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

AMSC899 Doctoral Dissertation Research

(Perm req) Credits: 6 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

AMST American Studies Fall 2019

AMST101 Introduction American Studies

Credits: 3 Grading Method: Regular, CORE: HO, D General Education: DSHU,
Pass-Fail, Audit DVUP

Credit only granted for: AMST101 or AMST201. Formerly: AMST201.

Introduces students to the interdisciplinary field of American Studies by examining concepts such as culture, identity, cultural practices, and globalization, as well as theories underlying these concepts. Engages key themes, especially constructions of difference and identity, cultures of everyday life, and America and the world.

0101	Timothy Kumfer	Seats (Total: 25)
	MWF 9:00am - 9:50am	KEY 0125
0201	Timothy Kumfer	Seats (Total: 25)
	MWF 1:00pm - 1:50pm	SQH 1121
0301	Mark Lockwood	Seats (Total: 25)
	TuTh 8:00am - 9:15am	KEY 0120
0401	Adelaida Shelley	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	JMP 1202

FCB1	Yvonne Bramble	Seats (Total: 22)	
	F 10:00am - 11:15am	ARC 1101	
	Class time/details on ELMs	ONLINE	Discussion
<i>Restricted to students in Freshmen Connection.</i>			

AMST202 Cultures of Everyday Life in America

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH General Education: DSHS

Examine the structures and patterns of everyday life in the U.S., utilizing methods such as ethnography, oral history, survey research, and textual, visual, and material cultural analysis.

0101	Bayley Marquez	Seats (Total: 25)	
	MWF 10:00am - 10:50am	TWS 0328	

AMST203 Popular Culture in America

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO General Education: DSHU, DVUP

An introduction to American popular culture, its historical development, and its role as a reflection of and influence on our culture and society.

0101	Zachary Johnson	Seats (Total: 25)	
	MWF 11:00am - 11:50am	KEY 0116	
FCB1	Hazim Abdullah-Smith	Seats (Total: 22)	
	F 1:00pm - 2:15pm	ASY 3203	
	Class time/details on ELMs	ONLINE	Discussion
<i>Restricted to students in Freshmen Connection.</i>			
FCB2	Hazim Abdullah-Smith	Seats (Total: 22)	
	F 11:30am - 12:45pm	KNI 1103	
	Class time/details on ELMs	ONLINE	Discussion
<i>Restricted to students in Freshmen Connection.</i>			

AMST204 Film and American Culture Studies

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO General Education: DSHU, DVUP

Exploration of the American film from a historical perspective, illustrating the motion picture's role as an institutional phenomenon, as a form of communication, and as a source of cross-cultural study.

0101	Susan Pramschufer	Seats (Total: 35)
	TuTh 9:30am - 10:45am	ASY 3211

AMST205

Material Aspects of American Life

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HA General Education: DSHU, DVUP

Historical survey of American material culture. Ways of describing and interpreting accumulated material evidence (e.g., buildings, town plans) introduced by stressing relationship between artifact and culture.

FCB1	Shoji Sanders	Seats (Total: 25)
	F 11:30am - 12:45pm	ASY 3207
	Class time/details on ELMs	ONLINE Discussion
<i>Restricted to students in Freshmen Connection.</i>		
FCB2	Shoji Sanders	Seats (Total: 25)
	F 9:30am - 10:45am	WDS 0104
	Class time/details on ELMs	ONLINE Discussion
<i>Restricted to students in Freshmen Connection.</i>		

AMST262

Houses, Schools, and Prisons in American Life

Credits: 3 Grading Method: Regular General Education: DSHS, DVUP, SCIS

This interdisciplinary course explores the role of property, discipline, and punishment in American life. By exploring the ideological underpinnings in property, discipline, and punishment and their manifestations in houses, schools, and prisons we will explore how these entities reflect American society and its values.

0101	Perla Guerrero	Seats (Total: 15)
	MW 2:00pm - 2:50pm	TYD 1102
	F 10:00am - 10:50am	TWS 0134 Discussion
0102	Perla Guerrero	Seats (Total: 15)
	MW 2:00pm - 2:50pm	TYD 1102
	F 11:00am - 11:50am	TWS 0328 Discussion

0103	Perla Guerrero	Seats (Total: 15)	
	MW 2:00pm - 2:50pm	TYD 1102	
	F 1:00pm - 1:50pm	TWS 0328	Discussion
0104	Perla Guerrero	Seats (Total: 15)	
	MW 2:00pm - 2:50pm	TYD 1102	
	F 12:00pm - 12:50pm	TWS 0328	Discussion

AMST298C

Introduction to Asian American Studies

Credits: 3 Grading Method: Regular, Pass-Fail CORE: SB, D General Education: DSHS, DVUP

Cross-listed with: AAST200. Credit only granted for: AAST200 or AMST298C.

The aggregate experience of Asian Pacific Americans, from developments in the countries of origin to their contemporary issues. The histories of Asian Pacific American groups as well as culture, politics, the media, and stereotypes, viewed from an interdisciplinary perspective.

0101	Janelle Wong	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	SQH 1105

AMST298D

Selected Topics in American Studies; Martin Luther King, Jr.

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Cultural study of a specific theme or issue involving artifacts and documents from both past and contemporary American experience.

Jointly offered with HIST189D and AASP298M. Credit granted for HIST189D, AASP298M, or AMST298D.

0101	Quincy Mills	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	TLF 2100

AMST298I

Selected Topics in American Studies; Islam in/and America

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Cultural study of a specific theme or issue involving artifacts and documents from both past and contemporary American experience.

Cross-listed with AAST298A and HIST219V. Credit granted for AMST298I, AAST298A, or HIST219V.

0101	Jisun Min	Seats (Total: 10)
	TuTh 2:50pm - 4:10pm	SQH 2122

AMST298Q U.S. Latinx Literature and Culture

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO, D General Education: DSHU, DVUP

Cross-listed with: ENGL235. Credit only granted for: ENGL235 or AMST298Q.

Examines the poetry, prose, and theater of Latinx communities in the United States from their origins in the Spanish colonization of North America to their ongoing development in the 21st century. Considers how authors use literary form to gain insight into human experience, including mortality, religious belief, gender and sexuality, war and peace, family, language use, scientific inquiry, cultural tradition, ecology, and labor. Also studies how Latinx literary traditions have shaped and been shaped by broader currents in American literature, as well as what connections exist between Latinx literature and social and artistic developments in other parts of the world, particularly Latin America and the Caribbean. Authors may include Alvar Nunez Cabeza de Vaca, Eulalia Perez, Juan Nepomuceno Seguin, Maria Amparo Ruiz de Burton, Jose Marti, Arthur A. Schomburg, Jesus Colon, Julia de Burgos, Cesar Chavez, Ariel Dorfman, Gloria Anzaldua, Junot Diaz, and Cristina Garcia.

Cross-listed with ENGL235. Credit granted for ENGL235 or AMST298Q.

0101	Nancy Vera	Seats (Total: 30)
	MW 5:00pm - 6:15pm	KEY 0102

AMST328J Perspectives on Identity and Culture; Filipino American History and Biography

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, DVUP

Analysis of the cultural aspect of identity formation and the role of individual or community identities in cultural production. Examination of cultural texts such as film, literature, fashion, artifacts, archival records, architecture, monuments, sports, and paintings.

Also offered as AAST398D. Credit granted for AAST398D or AMST328J. Focus is placed on Filipino American experiences with an emphasis on identity, community building and organizing to influence public policy. We will cover pertinent events from the US and Philippine history in order to understand the impact of colonialism, migration, immigration and assimilation on Filipino Americans.

0101	Gemirald Daus	Seats (Total: 35)
	Tu 5:00pm - 7:30pm	SQH 1121

AMST328L Perspectives on Identity and Culture; Introduction to Comparative Ethnic Studies

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Analysis of the cultural aspect of identity formation and the role of individual or community identities in cultural production. Examination of cultural texts such as film, literature, fashion, artifacts, archival records, architecture, monuments, sports, and paintings.

Cross-listed with AAST398F. Credit granted for AMST328L or AAST398F. Introduces students to the study of race and ethnicity in the United States. Through readings, film clips, and presentations, we explore how the concept of race has developed and endured over time through institutions and policies. This course will also help students to better understand how race is associated with other forms of difference, such as class, gender and ethnicity. We identify and confront prevailing myths about race and ethnicity in the United States. Finally, we examine the ways in which contemporary issues reveal the dynamics of race and ethnicity.

0101	Janelle Wong	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	SQH 1107

AMST328X Perspectives on Identity and Culture; (Dis)ability in American Film

Credits: 3 Grading Method: Regular, General Education: DSHU,
Pass-Fail, Audit DSSP, DVUP

Analysis of the cultural aspect of identity formation and the role of individual or community identities in cultural production. Examination of cultural texts such as film, literature, fashion, artifacts, archival records, architecture, monuments, sports, and paintings.

0101	Susan Pramschufer	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ARC 1125

AMST340 Introduction to History, Theories and Methods in American Studies

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed AMST201; and 2 courses in AMST. Restriction: Must be in American Studies program; and sophomore standing or higher.

Introduction to the process of interdisciplinary research, including research literatures, questions, first-hand sources and library and analytic methods in American Studies. Each student will craft a prospectus for original research.

0101	Robert Jiles	Seats (Total: 15)
	TuTh 9:30am - 10:45am	TWS 0134
0201	Bayley Marquez	Seats (Total: 15)
	MW 11:00am - 12:15pm	TWS 0134

AMST386**Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular,
Pass-Fail*Restriction: Permission of ARHU-American Studies department; and junior standing or higher.*

0401

Mary Sies

Seats (Total: 10)

Contact instructor or department for details.

AMST388**Honors Thesis**

(Perm req)

Credits: 3

Grading Method: Regular

*Individual research, thesis and oral defense. The research project will be conducted under the supervision of a faculty member.***Contact department for information to register for this course.**

AMST398**Independent Studies**

(Perm req)

Credits: 1-3

Grading Method: Regular

*Provides the student with the opportunity to pursue independent, interdisciplinary research and reading in specific areas of American culture studies.***Contact department for information to register for this course.**

AMST418H**Cultural Themes in America; Cultural Themes in America-Honors**

(Perm req)

Credits: 3

Grading Method: Regular

Examination of structure and development of American culture through themes such as "growing up American," "culture and mental disorders," "race," "ethnicity," "regionalism," "landscape," and "humor."

Prerequisite: At least three credit hours of prior coursework in AMST.

Contact department for information to register for this course.

AMST429M**Perspectives on Popular Culture; True Storytelling and Narratives of Cultural Identity**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit*Topics in popular culture studies, including the examination of particular genres, themes, and issues.*

Cross-listed with ANTH429M and THET408I. Credit granted for THET408I, ANTH429M or AMST429M.

0101	Laurie Frederik	Seats (Total: 10)
	M 3:00pm - 5:30pm	PAC 2740

AMST450

Seminar in American Studies

(Perm req)

Credits: 3

Grading Method: Regular

CORE: CS

General Education: DSSP

Prerequisite: AMST201 and AMST340; and 1 course in AMST. Restriction: Senior standing; and must be in American Studies program.

Developments in theories and methods of American Studies scholarship, with emphasis upon interaction between the humanities and the social sciences in the process of cultural analysis and evaluation.

Developments in theories and methods of American Studies scholarship, with emphasis upon interaction between the humanities and the social sciences in the process of cultural analysis and evaluation.

0201	Asim Ali	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	TWS 0330

AMST498B

Special Topics in American Studies; Revolutions and Diasporas

Credits: 3

Grading Method: Regular

Topics of special interest.

Cross-listed with USLT498R. Credit granted for AMST498B or USLT498R.

0101	Nancy Mirabal	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	TWS 0134

AMST498C

Special Topics in American Studies; Central Americans and the United States: Culture, Politics, and Community

Credits: 3

Grading Method: Regular

Topics of special interest.

Cross-listed with USLT498D. Credit granted for USLT498D or AMST498C.

0101	Robert Chester	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	TWS 0134

AMST498E

Special Topics in American Studies; Race and Reproduction

Credits: 3 Grading Method: Regular

Topics of special interest.

Cross-listed with AASP499C, SOCY498F, SOCY699B and WMST428C. Credit only granted for AASP499C, AMST498E, SOCY498F, SOCY699B or WMST428C.

0101	Sangeetha Madhavan	Seats (Total: 35)
	W 2:00pm - 4:30pm	ASY 3203

AMST498G Special Topics in American Studies; Latinas/os on the Silver Screen

Credits: 3 Grading Method: Regular

Topics of special interest.

Cross-listed with USLT498A. Credit granted for AMST498G or USLT498A.

0101	Robert Chester	Seats (Total: 30)
	TuTh 9:30am - 10:45am	HBK 0109

AMST498W Special Topics in American Studies; Globalization and the Diversifying US

Credits: 3 Grading Method: Regular

Topics of special interest.

Prerequisite: At least three credit hours of prior coursework in AMST. Cross-listed with USLT430 and IMMR419J. Credit granted for USLT430, USLT498N, AMST498W, or IMMR419J.

0101	Jacqueline Partida	Seats (Total: 30)
	MWF 10:00am - 10:50am	SQH 1107

AMST601 Introductory Theories and History in American Studies

Credits: 3 Grading Method: Regular

Restriction: Must not be a Graduate Advanced Special Student.

Explores the formative literature, theories, research approaches, and history of American Studies.

0101	Christina Hanhardt	Seats (Total: 15)
	M 4:00pm - 6:40pm	TWS 0134

AMST628B Seminar in American Studies; US Intellectual History Ideas: Race, Class, Gender, and Sexuality

Credits: 3 Grading Method: Regular, Audit

0101	Nancy Mirabal	Seats (Total: 15)
	Tu 4:00pm - 6:40pm	TWS 0134

(Perm req)

Credits: 3 Grading Method: Regular, Audit

0101	La Marr Bruce	Seats (Total: 12)
	W 4:00pm - 6:40pm	TWS 0134

Credits: 3 Grading Method: Regular, Audit

0101	Laurie Frederik	Seats (Total: 5)
	M 3:00pm - 5:30pm	PAC 2740

Credits: 3 Grading Method: Regular, Audit

0101	Laurie Frederik	Seats (Total: 10)
	Tu 2:00pm - 4:30pm	PAC 2515C

Credits: 3 Grading Method: Regular, Audit

Cross-listed with HIST610, ANTH655. Credit only granted for: AMST655, ANTH655, or HIST610.

Provides students a basic understanding of museums as cultural and intellectual institutions. Topics include the historical development of museums, museums as resources for scholarly study, and the museum exhibition as medium for presentation of scholarship.

0101	Diana Marsh	Seats (Total: 15)
	W 7:00pm - 9:45pm	WDS 1127

AMST698

Directed Readings in American Studies

(Perm req)

Credits: 3 Grading Method: Regular

This course is designed to provide students with the opportunity to pursue independent, interdisciplinary research and reading in specific aspects of American culture under the supervision of a faculty member.

Contact department for information to register for this course.

AMST798

Non-Thesis Research

Credits: 1-3 Grading Method: Regular,
Audit

Contact department for information to register for this course.

AMST799

Master's Thesis Research

Credits: 1-6 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

AMST857

Museum Scholarship Practicum

Credits: 3 Grading Method: Regular

Prerequisite: AMST856, ANTH856, or HIST810. Restriction: Permission of Museum Scholarship Program required. Cross-listed with ANTH857, HIST811. Credit only granted for: AMST857, ANTH857, or HIST811.

Students devise and carry out a research program using the collections at the Smithsonian Institution or some other cooperating museum, working under joint supervision of a museum professional and a university faculty member.

0101	Mary Alexander	Seats (Total: 3)
	Contact instructor or department for details.	
0401	Mary Sies	Seats (Total: 2)
	Contact instructor or department for details.	

0901	Ricardo Punzalan	Seats (Total: 2)
Contact instructor or department for details.		

AMST878A American Studies Pedagogy Mentoring; Mentoring for First Year Teaching in American Studies

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

This course provides graduate teaching assistants with a structured approach to pedagogical content, techniques, and collaborative practices that they learn and then can use throughout their careers. It also commits a core faculty member to teaching pedagogy and makes it possible for the course to become a formal part of one's load.

Prerequisite: permission of department and must be a current AMST teaching assistant.

0101	Christina Hanhardt	Seats (Total: 5)
Contact instructor or department for details.		

AMST878B American Studies Pedagogy Mentoring; Mentoring for Second Year Teaching in American Studies

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

This course provides graduate teaching assistants with a structured approach to pedagogical content, techniques, and collaborative practices that they learn and then can use throughout their careers. It also commits a core faculty member to teaching pedagogy and makes it possible for the course to become a formal part of one's load.

Prerequisite: permission of department and must be a current AMST teaching assistant.

0101	Christina Hanhardt	Seats (Total: 5)
Contact instructor or department for details.		

AMST878C American Studies Pedagogy Mentoring; Mentoring for Third Year Teaching in American Studies

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

This course provides graduate teaching assistants with a structured approach to pedagogical content, techniques, and collaborative practices that they learn and then can use throughout their careers. It also commits a core faculty member to teaching pedagogy and makes it possible for the course to become a formal part of one's load.

Prerequisite: permission of department and must be a current AMST teaching assistant.

0101	Christina Hanhardt	Seats (Total: 5)
Contact instructor or department for details.		

AMST898**Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

AMST899**Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

ANSC Animal Science

Fall 2019

The following courses may involve the use of animals. Students who are concerned about the use of animals in teaching have the responsibility to contact the instructor, prior to course enrollment, to determine whether animals are to be used in the course, whether class exercises involving animals are optional or required and what alternatives, if any, are available.

ANSC101**Principles of Animal Science**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A comprehensive overview of the application of biology in the care and use of animals that live in close association with humans including food animals, companion animals, lab animals, zoo animals, etc. The role of science in modern food production using animals will be emphasized.

0101	Sarah Balcom	Seats (Total: 161)
	MWF 1:00pm - 1:50pm	ESJ 2208

ANSC103**Principles of Animal Science Laboratory**

Credits: 1 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in ANSC101. Restriction: Must be in one of the following programs (Environmental Sci & Pol-Environment & Agriculture; Agricultural and Veterinary Medicine; Agricultural Science and Technology) ; or must be in a major within the AGNR-Animal & Avian Sciences department; or permission of department required for students in other College of AGNR programs.

Laboratory focusing on the application of biology in the care and use of animals that live in close association with humans including food animals, companion animals, lab animals, zoo animals, etc. Labs will include live animals. Offered in fall semester only.

Students must pay a \$50.00 laboratory materials fee.

0101	Megan McLean M 3:00pm - 4:50pm	Seats (Total: 20) ANS 1144	Lab
0201	Megan McLean Tu 2:00pm - 3:50pm	Seats (Total: 20) ANS 1144	Lab
0301	Megan McLean F 10:00am - 11:50am	Seats (Total: 20) ANS 1144	Lab
0401	Megan McLean Th 2:00pm - 3:50pm	Seats (Total: 20) ANS 1144	Lab
0501	Megan McLean W 3:00pm - 4:50pm	Seats (Total: 20) ANS 1144	Lab
0701	Megan McLean W 10:00am - 11:50am	Seats (Total: 20) ANS 1144	Lab

ANSC204

Anatomy of Domestic Animals

Credits: 2 Grading Method: Regular

Prerequisite: ANSC101 and ANSC103. And BSCI105; or (BSCI170 and BSCI171). Corequisite: ANSC205. Restriction: Must be in one of the following programs (Environmental Sci&Pol-Wildlife Resources & Cons; Animal Sciences: Animal Care & Management; Animal Sciences: Equine Studies; Animal Sciences: Laboratory Animal Care; Animal Sciences: Sciences/Preprofessional; Animal Sciences: Animal Biotechnology; Agricultural and Veterinary Medicine). Credit only granted for: ANSC211 or ANSC204 AND ANSC205. Formerly: ANSC211.

Covering the anatomy of major species of domestic animals. Utilizes a systemic approach to provide a general knowledge of both gross and microscopic mammalian structure. Comparative differences between the major domestic species are covered.

0101	Angela Black MW 2:00pm - 2:50pm	Seats (Total: 110) JMP 3201
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ANSC205

Anatomy of Domestic Animals Laboratory

Credits: 2 Grading Method: Regular

Prerequisite: ANSC101 and ANSC103. And BSCI105; or (BSCI170 and BSCI171). Corequisite: ANSC204. Restriction: Must be in one of the following programs (Environmental Sci&Pol-Wildlife Resources & Cons; Animal Sciences: Animal Care & Management; Animal Sciences: Equine Studies; Animal Sciences: Laboratory Animal Care; Animal Sciences: Sciences/Preprofessional; Animal Sciences: Animal Biotechnology; Agricultural and Veterinary Medicine). Credit only granted for: ANSC211 or ANSC204 and ANSC205. Formerly: ANSC211.

A regional approach is taken to study the gross anatomy of major domestic species in the laboratory portion of this course.

Students must pay a \$50.00 laboratory materials fee.

0101	Angela Black	Seats (Total: 22)	
	Tu 9:00am - 12:00pm	ANS 0108	Lab
0102	Angela Black	Seats (Total: 22)	
	Tu 1:00pm - 4:00pm	ANS 0108	Lab
0103	Angela Black	Seats (Total: 22)	
	Th 9:00am - 12:00pm	ANS 0108	Lab
0104	Angela Black	Seats (Total: 22)	
	Th 1:00pm - 4:00pm	ANS 0108	Lab
0105	Angela Black	Seats (Total: 22)	
	W 9:00am - 12:00pm	ANS 0108	Lab

ANSC210 Veterinary Terminology

Credits: 1 Grading Method: Regular,
 Audit

Prerequisite: ANSC204 and ANSC205.

Students will learn terminology related to the clinical practice of small and large animal medicine including medical record terminology and a systems-based consideration of common practices and pathologies. The course is offered on-line through a series of self-paced modules on ELMS.

0101	Sarah Balcom	Seats (Total: 20)	
	Class time/details on ELMS	ONLINE	

ANSC227 Eating with Eyes Wide Open

Credits: 3 Grading Method: Regular, General Education: DSNS,
 Pass-Fail, Audit SCIS

Students will investigate the tension that is created by trade-offs that, knowingly or not, are made by consumers relative to agricultural production methods and dietary choices. Course will inform students about their food supply so they can make informed decisions and practice intentional or informed eating.

0101	R Apter	Seats (Total: 20)	
	TuTh 9:30am - 10:20am	CHE 2108	
	M 1:00pm - 2:50pm	ANS 1144	Lab
0102	R Apter	Seats (Total: 20)	
	TuTh 9:30am - 10:20am	CHE 2108	
	W 8:00am - 9:50am	ANS 1144	Lab
0103	R Apter	Seats (Total: 20)	
	TuTh 9:30am - 10:20am	CHE 2108	
	W 1:00pm - 2:50pm	ANS 1144	Lab

ANSC232 Horse Management

Credits: 3 Grading Method: Regular

Prerequisite: ANSC101 and ANSC103. Credit only granted for: ANSC232 or ANSC332. Formerly: ANSC332.

An introductory course on the care, management, and use of horses. Major topics include the industry, breeds, conformation, feeding, health, reproduction, facilities and business.

Students must pay a \$50.00 lab materials fee.

0101	Amy Burk	Seats (Total: 20)	
	MW 10:00am - 10:50am	ANS 0408	
	F 9:00am - 10:50am	ANS 0412	Lab

ANSC242 Dairy Cattle Management

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ANSC101 and ANSC103. Formerly: ANSC240 and ANSC241.

All aspects of dairy production, including nutrition, reproduction, mastitis control, milking management, farmstead facilities, financial management and forage production.

Students must pay a \$50.00 lab materials fee.

0101	Robert Peters	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	ANS 0408

ANSC252 Introduction to the Diseases of Wildlife

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BSCI105; or (BSCI170 and BSCI171); or permission of AGNR-Animal & Avian Sciences department; or students who have taken courses with comparable content may contact the department.

The principal diseases of North American wildlife will be briefly considered. For each disease, specific attention will be given to the following: signs evidenced by the affected animal or bird, causative agent, means of transmission and effects of the disease on the population of the species involved.

Offered fall only.

0101	Cindy Driscoll	Seats (Total: 80)
	M 4:00pm - 5:50pm	ANS 0408
	M 6:00pm - 6:50pm	ANS 0408 Discussion

ANSC255 Introduction to Aquaculture

Credits: 3 Grading Method: Regular General Education: DSSP

Prerequisite: ANSC101 and ANSC103; or must have completed an introductory biology course.

Introduces the art and science of rearing aquatic animals and the essential principles of aquaculture. Students receive hands-on training in the methods required for successful husbandry and management of aquatic animals in their water environment.

Students must pay a \$50.00 lab materials fee.

0101	Daniel Theisen	Seats (Total: 20)
	TuTh 11:00am - 12:50pm	ANS 1144

ANSC270 Animal Enterprise Management

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ANSC101 and ANSC103; or permission of instructor. Credit only granted for: ANSC270 or AREC306.

General principles of enterprise organization, management, and operation as applicable to food, livestock, and companion animals. Enterprise planning and establishment, management of financial, human, and animal resources, and other related topics will be investigated.

0101	R Apter	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	ANS 0412

ANSC314 **Comparative Animal Nutrition**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ANSC101 and ANSC103; and (CHEM231 or PLSC275).

The fundamental role and implications of dietary preference, gastrointestinal physiology and nutrients in animal nutrition. Biochemical roles of nutrients in metabolism, digestion, absorption and assimilation as it relates to various life processes.

Offered fall only.

0101	Nishanth Sunny	Seats (Total: 88)
	MWF 9:00am - 9:50am	ANS 0408

ANSC359 **Internship Experience in Animal and Avian Sciences**

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail General Education: DSSP

Experiential learning is a key component in an animal science education. Through the internship program, you will have the opportunity to develop your expertise in a specific species and discipline within the animal science curriculum. You will arrange an on- or off-campus internship experience related to animal science. You will spend a specified number of hours at the internship site each week and attend biweekly classroom sessions where we will discuss how the study of animal science fits into your specific internship experience as well as understand how to achieve each of the course learning outcomes.

Prerequisite: ANSC220, ANSC232, ANSC242, ANSC250, ANSC255, ANSC260, or ANSC262.

Restriction: Must be in a major within the AGNR-Animal & Avian Sciences department; and permission of instructor.

0101	Monica VanKlombenberg	Seats (Total: 20)
	Tu 3:30pm - 5:30pm	ANS 0402

ANSC379 **Animal Science Undergraduate Teaching Assistant Seminar**

(Perm req)

Credits: 2 Grading Method: Regular

Seminar course for undergraduate teaching assistants within ANSC.

0101	Sarah Balcom	Seats (Total: 15)
	W 12:00pm - 12:50pm	ANS 1408
	Contact instructor or department for details.	

ANSC388**Honors Thesis Research**

Credits: 3-6 Grading Method: Regular

Undergraduate honors thesis research conducted under the direction of an AGNR faculty member in partial fulfillment of the requirements of the College of AGNR Honors Program. The thesis will be defended to a faculty committee.

0701	Chad Stahl	Seats (Total: 5)
	Contact instructor or department for details.	
2501	Richard Kohn	Seats (Total: 5)
	Contact instructor or department for details.	
5201	Amy Burk	Seats (Total: 5)
	Contact instructor or department for details.	

ANSC389**Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Contact department for information to register for this course.

ANSC399**Special Problems in Animal Science**

(Perm req)

Credits: 1-2 Grading Method: Regular,
Pass-Fail, Audit

Work assignments are designed to be proportional to the amount of credit. Students are expected to develop an abstract, fact sheet, manuscript, oral presentation, poster, webpage, journal-log, or other scholarly product associated with their study and/or project.

Contact department for information to register for this course.

ANSC417**Regulatory Issues in Animal Care and Management**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ANSC220, ANSC232, ANSC242, ANSC250, ANSC255, ANSC260, ANSC262, or ANSC282; or permission of instructor. Additional information: Field trips may be required for this course.

A study of regulatory issues affecting animal care and management in the livestock industry. Guest speakers and classroom discussions will focus on key topics including animal welfare, feed and drug regulations, animal identification, CAFO management, processing and marketing of animal products.

0101	Monica VanKlombenberg	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ANS 0402

ANSC437 Animal Biotechnology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ANSC327; or students who have taken courses with comparable content may contact the department.

Key concepts and current issues in animal biotechnology are covered. Current techniques and applications systems as well as social, ethical, and regulatory issues associated with biotechnology will be discussed.

0101	Carol Keefer	Seats (Total: 20)
	MWF 10:00am - 10:50am	ANS 0402

ANSC446 Physiology of Mammalian Reproduction

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ANSC212 or BSCI440.

Anatomy and physiology of reproductive processes in domesticated and wild mammals.

0101	Bhanu Telugu	Seats (Total: 80)
	TuTh 2:00pm - 3:15pm	ANS 0408

ANSC447 Physiology of Mammalian Reproduction Laboratory

(Perm req) Credits: 1 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in ANSC446.

Gross and micro-anatomy, artificial insemination, estrous cycle synchronization and invitro-fertilization procedures and analytical techniques useful in animal management and reproduction.

Students must pay a \$50.00 laboratory materials fee.

0101	Bhanu Telugu	Seats (Total: 30)	
	F 1:00pm - 2:50pm	ANS 0108	Lab

ANSC450 Animal Breeding Plans

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ANSC101; and 1 course with a minimum grade of C- from (MATH120, MATH130, MATH136, MATH140). Restriction: Junior standing or higher.

Design of animal breeding programs for the genetic improvement of livestock and companion animal species. Principles of population and quantitative genetics. Genetic evaluations of animals, selection strategies and crossbreeding systems. Incorporation of statistics and biotechnology into animal breeding plans.

0101	Monica VanKlompberg	Seats (Total: 35)	
	MWF 3:00pm - 3:50pm	ANS 0408	

ANSC455 Applied Animal Behavior

Credits: 3 Grading Method: Regular

Prerequisite: ANSC101 and ANSC103; or BSCI106; or (BSCI160 and BSCI161).

Principles of animal behavior applied to production systems in animal agriculture.

Offered fall only.

0101	R Apter	Seats (Total: 55)	
	MW 11:00am - 11:50am	ANS 0408	
	F 11:00am - 12:50pm	ANS 0408	Lab

ANSC460 Comparative Vertebrate Immunology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ANSC212, BSCI201, or BSCI440. Credit only granted for: ANSC460 or ANSC489I. Formerly: ANSC489I.

Basic concepts in immunology, and comparing immunity in different vertebrates, including organization of immune systems, innate and adaptive immune responses. Special attention will be paid to how cell-mediated and humoral immune responses are induced in natural infections, and what are the effector mechanisms in both of these processes. Immune response in representative disease models such as infections with viruses and bacteria, cancer, and autoimmune disease will be discussed. Lectures concerning cutting-edge research will also be given.

0101	Zhengguo Xiao	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	ANS 0412

ANSC489 Current Topics in Animal Science

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Examination of current developments in the animal sciences.

Contact department for information to register for this course.

ANSC660 Poultry Literature

Credits: 1-4 Grading Method: Regular,
Audit

Readings on individual topics are assigned. Written reports required. Methods of analysis and presentation of scientific material are discussed.

Contact department for information to register for this course.

ANSC688I Special Topics; Comparative Vertebrate Immunology

Credits: 3 Grading Method: Regular,
Audit

Lectures, experimental courses, and other special subjects in the fields of animal sciences and veterinary medicine.

0101	Zhengguo Xiao	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	ANS 0412

ANSC698C Seminar; Recent Advances in Animal and Avian Sciences

Credits: 1 Grading Method: Regular,
Audit

Students are required to prepare papers based upon current scientific publications relating to animal science, or upon their research work, for presentation before and discussion by the class; (1) recent advances; (2) nutrition; (3) physiology; (4) biochemistry.

0101	Richard Kohn	Seats (Total: 25)
	Tu 3:30pm - 5:30pm	ANS 0408

ANSC698D Seminar; Developing Presentation Skills

Credits: 1 Grading Method: Regular,
Audit

Students are required to prepare papers based upon current scientific publications relating to animal science, or upon their research work, for presentation before and discussion by the class; (1) recent advances; (2) nutrition; (3) physiology; (4) biochemistry.

0101	Richard Kohn	Seats (Total: 12)
	Tu 3:30pm - 5:30pm	ANS 0408
	Th 3:30pm - 4:30pm	ANS 0408 Discussion

ANSC699 Special Problems in Animal Science

(Perm req) Credits: 1-2 Grading Method: Regular,
Audit

Work assigned in proportion to amount of credit. Prerequisite: approval of staff. Problems will be assigned which relate specifically to the character of work the student is pursuing.

Contact department for information to register for this course.

ANSC799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ANSC898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ANSC899 Doctoral Dissertation Research

(Perm req) Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

ANTH Anthropology

Fall 2019

ANTH210 Introduction to Medical Anthropology and Global Health

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSHS,
DVUP

An introduction to the central concepts in medical anthropology and the anthropology of global health. This course is a survey of anthropological notions of health, disease, and the body in cross-cultural and global contexts, including classic and contemporary texts. It will provide an examination of systems of knowledge and practice with regard to illness, healing, and global health inequities.

0101	Laura Gilchrest	Seats (Total: 20)	
	MW 11:00am - 11:50am	SQH 1119	
	F 12:00pm - 12:50pm	WDS 1131	Discussion
0102	Laura Gilchrest	Seats (Total: 20)	
	MW 11:00am - 11:50am	SQH 1119	
	F 1:00pm - 1:50pm	WDS 1131	Discussion
0103	Laura Gilchrest	Seats (Total: 20)	
	MW 11:00am - 11:50am	SQH 1119	
	F 2:00pm - 2:50pm	WDS 1131	Discussion

ANTH221 Introduction to Forensic Sciences

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSSP

Credit only granted for: ANTH298A or ANTH221. Formerly: ANTH298A.

Provides a brief history of forensic sciences, an introduction to some of the techniques used, and a demonstration of some of the applications of forensic sciences. A survey course designed to give the student some exposure to the kinds of scientific knowledge and techniques applied to the medico-legal investigation of death and other crimes.

FC01	Erin Guthrie	Seats (Total: 24)	
	TuTh 6:00pm - 7:15pm	WDS 0124C	
	<i>Restricted to students in Freshman Connection.</i>		

ANTH222 Introduction to Ecological and Evolutionary Anthropology

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit CORE: LL General Education: DSNL,
DVUP

Credit only granted for: ANTH220 or ANTH222.

An introduction to the evolution of human physiology and human behavior, the relationship between hominid and non-hominid primates, and the study of relationships between a population of humans and their biophysical environment.

0101	L Jen Shaffer TuTh 12:30pm - 1:45pm M 8:00am - 10:00am	Seats (Total: 20) ESJ 2208 WDS 0124C	Lab
0102	L Jen Shaffer TuTh 12:30pm - 1:45pm M 11:00am - 1:00pm	Seats (Total: 20) ESJ 2208 WDS 0124C	Lab
0103	L Jen Shaffer TuTh 12:30pm - 1:45pm M 2:00pm - 4:00pm	Seats (Total: 20) ESJ 2208 WDS 0124C	Lab
0104	L Jen Shaffer TuTh 12:30pm - 1:45pm W 8:00am - 10:00am	Seats (Total: 20) ESJ 2208 WDS 0124C	Lab
0105	L Jen Shaffer TuTh 12:30pm - 1:45pm W 11:00am - 1:00pm	Seats (Total: 20) ESJ 2208 WDS 0124C	Lab
0106	L Jen Shaffer TuTh 12:30pm - 1:45pm W 2:00pm - 4:00pm	Seats (Total: 20) ESJ 2208 WDS 0124C	Lab

ANTH240

Introduction to Archaeology

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB, D General Education: DSHS, DVUP

Exploration of the variety of past human societies and cultures through archaeology, from the emergence of anatomically modern humans to the more recent historical past.

0101	Valerie Hall TuTh 11:00am - 12:15pm	Seats (Total: 20) TLF 1101
0301	Mark Leone MWF 11:00am - 11:50am	Seats (Total: 35) WDS 1114
FC01	Adam Fracchia MW 4:30pm - 5:45pm	Seats (Total: 26) WDS 1114

Restricted to students in Freshmen Connection.

ANTH260**Introduction to Sociocultural Anthropology and Linguistics**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: SB, D

General Education: DSHS,
DVUP

Culture and social relationships in a wide variety of settings from small-scale to complex societies. An overview of how anthropology analyzes human behavior. Particular attention to the relationship between language and culture.

0101	Yancey Orr	Seats (Total: 25)	
	M 12:00pm - 1:50pm	ANS 0408	
	F 12:00pm - 12:50pm	TWS 1320	Discussion
0102	Yancey Orr	Seats (Total: 25)	
	M 12:00pm - 1:50pm	ANS 0408	
	F 1:00pm - 1:50pm	TWS 1313	Discussion
0103	Yancey Orr	Seats (Total: 25)	
	M 12:00pm - 1:50pm	ANS 0408	
	F 2:00pm - 2:50pm	TWS 1320	Discussion
0104	Yancey Orr	Seats (Total: 25)	
	M 12:00pm - 1:50pm	ANS 0408	
	F 11:00am - 11:50am	TWS 1320	Discussion
FC01	Jana Kopelentova Rehak	Seats (Total: 30)	
	MW 6:00pm - 7:15pm	WDS 1114	
<i>Restricted to students in Freshmen Connection.</i>			

ANTH263**Sexuality and Culture**

Credits: 3

Grading Method: Regular,
Pass-Fail, AuditGeneral Education: DSHS,
DVUP

Credit only granted for: ANTH298K or ANTH263. Formerly: ANTH298K.

An overview of sexuality from an anthropological perspective, looking at aspects of sexuality within our own culture and in cultures around the world. Course topics include the biology and culture of sex, gender, physical attraction, sexual orientation, marriage and mating taboos, fertility control, sexually transmitted diseases, and commercial aspects of sex.

FCB1	Jeanne Hanna	Seats (Total: 30)	
	Tu 6:00pm - 7:15pm	AJC 2121	
	Class time/details on ELMs	ONLINE	
<i>Restricted to students in Freshmen Connection.</i>			

ANTH264 Immigration Policy, Immigrant Lives

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSHS,
DVUP, SCIS

Cross-listed with: IMMR219C. Credit only granted for: ANTH264 or IMMR219C.

An examination of the phenomenon of international migration, or immigration. Students develop awareness of how immigration has been framed in the general public and examined by social science disciplines, most prominently anthropology. Examination of case studies of different immigrant groups in distinct geographic contexts will illuminate the varied incorporation experiences of immigrants into U.S. society.

0101	Christina Getrich TuTh 9:30am - 10:20am F 9:00am - 9:50am	Seats (Total: 20) TYD 1101 SQH 1103 Discussion
0102	Christina Getrich TuTh 9:30am - 10:20am F 10:00am - 10:50am	Seats (Total: 20) TYD 1101 SQH 1103 Discussion
0103	Christina Getrich TuTh 9:30am - 10:20am F 11:00am - 11:50am	Seats (Total: 20) TYD 1101 SQH 1103 Discussion

ANTH265 Anthropology of Global Health

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: SB General Education: DSHS,
DVUP, SCIS

An overview of the growing field of global health including health care systems, medical practices, ideas about illness in cross-cultural contexts, issues of health development, global health inequity, and human rights issues. The course will focus on the history of global health, the critique of major international health agencies and their development paradigms, and the political economy of social inequalities and health.

FCB1	Emilia Guevara Tu 7:30pm - 8:45pm Class time/details on ELMs	Seats (Total: 31) KEY 0126 ONLINE Discussion
<i>Restricted to students in Freshmen Connection.</i>		

ANTH266 Changing Climate, Changing Cultures

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS, DVCC, SCIS

Explore past, present, and future interactions between humans and climate. Discussions, methods-oriented activities, and case study analyses provide students a foundation for appreciating the role of anthropology in understanding, responding to, and preparing for climate change.

FCB1	Jana Kopelentova Rehak	Seats (Total: 35)
	Th 7:30pm - 8:45pm	KEY 0103
	Class time/details on ELMs	ONLINE
<i>Restricted to students in Freshmen Connection.</i>		

ANTH322 Method and Theory in Ecological Anthropology

Credits: 3 Grading Method: Regular

Prerequisite: ANTH220 or ANTH222. Restriction: Must be in a major within the BSOS-Anthropology department. Credit only granted for: ANTH320, ANTH322, ANTH425, or ANTH625.

A theoretical consideration of ecological anthropology, focusing on issues related to cooperation, the management of common property, resilience, and sustainability. Explores the methods of sociocultural anthropology, including ethnology, evolutionary game theory and agent-based modeling; and natural-science approaches including behavioral and systems ecology.

0101	L Jen Shaffer	Seats (Total: 35)
	TuTh 9:30am - 10:45am	EDU 3315

ANTH323 Plagues, Pathogens and Public Policy

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, SCIS

Credit only granted for: ANTH429A or ANTH323. Formerly: ANTH429A.

The impact of diseases on populations from prehistoric times through the present will be examined, along with public perceptions of disease, scientific breakthroughs on treatment and prevention, and the ways that politics and public health policies can enhance or impede the advancement of disease treatment. The natural history of disease, population structure, and immunity will be discussed. The class will address emerging and re-emerging diseases and the ways that first responders, researchers, and policy makers may affect the outcome of an outbreak.

ESG1	Marilyn London	Seats (Total: 29)
	Tu 1:30pm - 4:00pm	BLD3 2226
<i>Restricted to Shady Grove students in the Public Health Sciences major.</i>		

SG92	Marilyn London	Seats (Total: 5)
	Tu 1:30pm - 4:00pm	BLD3 2226
<i>Restricted to Shady Grove CCJS students.</i>		

ANTH358A Undergraduate Teaching Assistant; Undergraduate Teaching Assistant in Archaeology
 (Perm req) Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit
Individual instruction course: contact department or instructor to obtain section and index numbers.
Contact department for information to register for this course.

ANTH358B Undergraduate Teaching Assistant; Undergraduate Teaching Assistant in Bio-Anthropology
 (Perm req) Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit
Individual instruction course: contact department or instructor to obtain section and index numbers.
Contact department for information to register for this course.

ANTH358C Undergraduate Teaching Assistant; Undergraduate Teaching Assistant in Cultural Anthropology
 (Perm req) Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit
Individual instruction course: contact department or instructor to obtain section and index numbers.
Contact department for information to register for this course.

ANTH360 Method and Theory in Sociocultural Anthropology
 Credits: 3 Grading Method: Regular, Pass-Fail, Audit
Prerequisite: ANTH260. Restriction: Must be in Anthropology program; or permission of BSOS-Anthropology department.
Theoretical approaches and research methods in sociocultural anthropology. Emphasis on current debates, new directions, and their historical antecedents.

0101	Jana Kopelentova Rehak	Seats (Total: 35)
	MW 2:00pm - 3:15pm	WDS 1114

ANTH380 Culture and Discourse
 Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Contemporary discourse analysis and pragmatics applied to ethnographic research problems with particular attention to roots in recent linguistic anthropological work in ethnographic semantics and ethnography of speaking.

ESG1	Jacqueline Messing	Seats (Total: 35)
	W 9:30am - 12:00pm	BLD3 2226
<i>Restricted to COMM majors at Shady Grove.</i>		

ANTH386**Experiential Learning**

(Perm req)

Credits: 1-6

Grading Method: Regular,
Pass-Fail

*Recommended: Completion of advanced courses in relevant subfield of anthropology recommended.
Restriction: Permission of BSOS-Anthropology department; and junior standing or higher; and must be in Anthropology program.*

Contact department for information to register for this course.

ANTH398A**Independent Study; Research Problems**

(Perm req)

Credits: 1-3

Grading Method: Regular

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398C**Independent Study; The Mediterranean World**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398E**Independent Study; Bodies and Burials**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398G**Independent Study; Ethnicity, Race and Nationality in Europe**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398H Independent Study; Social Anthropology of Britain (Honors)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398I Independent Study; Great Kingdoms of Ancient Near East

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398J Independent Study; Archaeology Practicum

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398K Independent Study; Archaeology of Roman Identity

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398L Independent Study; Social Anthropology of Britain

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

Contact department for information to register for this course.

ANTH398N Independent Study; Career Development for Anthropology Majors

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Independent interdisciplinary research and reading in specific areas of anthropology.

0101	Erik Hanson	Seats (Total: 15)
	Th 3:30pm - 4:45pm	WDS 1127

ANTH405 Anthropology of Human Rights

Credits: 3

Grading Method: Regular

General Education: DSHS,
DVUP

Examines human rights through four policy domains: inequality, migration, indigenous resource rights, and climate change. Combines fine-grained, ethnographic accounts with consideration of international human rights institutions and practices to weigh the strengths and limitations of a human rights framework for achieving social justice.

0101	Robert Winthrop	Seats (Total: 20)
	MW 2:00pm - 3:15pm	KEY 1117

ANTH413 Health Disparities in the United States

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: ANTH468Q, ANTH688Q, ANTH413, or ANTH613. Formerly: ANTH468Q.

Powerful economic, political, social, and cultural forces shape who gets sick, what illnesses/diseases they get, how they are treated while seeking care, what treatment options they have, and what their ultimate health outcomes are. The goal of the course is to understand these processes through the lens of critical medical anthropology

0101	Christina Getrich	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	WDS 1114

ANTH415 Advanced Studies in Global Health

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Recommended: ANTH210, ANTH310, or ANTH265 or a similar course focused on global health or medical anthropology course. Jointly offered with: ANTH615. Credit only granted for: ANTH415 or ANTH615.

Extends understandings of diverse health conditions facing world populations today and the science being made around them. Critically examines key issues in global aid and public health, with an emphasis on the theories, concepts, and methods of anthropology.

0101	Thurka Sangaramoorthy	Seats (Total: 20)
	M 12:00pm - 2:45pm	WDS 0104

ANTH429M Advanced Special Topics in Biological Anthropology; True Storytelling & Narratives of Cultural Identity

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Upper level biological anthropology courses on varying topics derived from new interests of the faculty or the specialties of visiting scholars.

Cross-listed with AMST429M and THET408I. Credit granted for THET408I, ANTH429M or AMST429M.

0101	Laurie Frederik	Seats (Total: 10)
	M 3:00pm - 5:30pm	PAC 2740

ANTH433 Archaeology of Slavery: Classical, Caribbean and North American Contexts

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: ANTH433 or ANTH633.

Has slavery always existed? Does it come and go? North American plantation archaeology has become one of the foundations for understanding African American culture from the 1960s. Slavery in Antiquity existed in Greece and Rome on large scales and was essential to making commercial agriculture profitable work. Slavery in the Caribbean showed Europeans how to make a profit from African bodies. Trafficking in human persons today is recorded by the U.S. State Department annually and is regarded as modern slavery. These varying contexts of slavery will be compared in an attempt to understand slavery scientifically.

0101	Mark Leone	Seats (Total: 20)
	M 2:00pm - 4:45pm	ESJ B0320

ANTH436 Norse Archaeology

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: ANTH436 or ANTH636.

The archaeology of the Norse world from the 8th century through to the end of the 11th century. We will investigate the possible causes of the Norse expansion out of Scandinavia. The various settlements and colonies of Norse Russia, the Baltic, Britain, Ireland and the North Atlantic Islands (Orkney, the Shetlands, the Faroes, Iceland, Greenland and Newfoundland) will be examined. While we will look at the Norse in detail we will also attempt to put their raiding, trading, and settlements into a larger Eurasian context through a study of the archaeology of this period.

0101	George Hambrecht	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	CSI 2120

ANTH447 Material Culture Studies in Archaeology

Credits: 3 Grading Method: Regular, General Education: DSSP
 Pass-Fail, Audit

Prerequisite: ANTH240. Credit only granted for: ANTH447, ANTH448C, ANTH647, or ANTH689C. Formerly: ANTH448C.

An in-depth introduction to the world of material culture studies with a focus on the methods and theories in historical archaeology. Students will look at archaeological data as historical documents, commodities and as symbols expressing ideas.

0101	Stephen Brighton	Seats (Total: 18)
	TuTh 12:30pm - 1:45pm	WDS 1130

ANTH451 Environmental Archaeology

Credits: 3 Grading Method: Regular, General Education: DSSP
 Pass-Fail, Audit

Credit only granted for: ANTH451, ANTH651, ANTH448F, ANTH668F. Formerly: ANTH448F.

An overview of modern environmental archaeology as a tool for the interdisciplinary investigation of past and present global change and to engage the long term past with current issues of sustainability and rapid environmental change.

0101	George Hambrecht	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	TLF 1103

ANTH453 Archaeology of the Modern City

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Prerequisite: ANTH240; or permission of instructor. Credit only granted for: ANTH448Q or ANTH453. Formerly: ANTH448Q.

An overview of how social scientists, in particular historical archaeologists, approach modern cities as being part of the materiality of the social structure and order.

0101	Stephen Brighton	Seats (Total: 18)
	TuTh 3:30pm - 4:45pm	WDS 1130

ANTH454 Political Ecology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Jointly offered with: ANTH654. Credit only granted for: ANTH454 or ANTH654.

The use of the environment is contested and negotiated within historic and contemporary societies. Incorporating methods and perspectives from across the social sciences through specific case studies in the Americas, Europe, Asia and Africa, this course offers a survey to coupled human-environmental systems.

0101	Yancey Orr	Seats (Total: 20)
	M 4:00pm - 6:45pm	KEY 1117

ANTH462 Amazon Through Film

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: ANTH468D or ANTH462. Formerly: ANTH468D.

An interdisciplinary course that utilizes film to consider the Amazon basin, its history, peoples, and landscapes through cinematic representations. The course places the films in the context of film history and critical theory. The course takes into consideration the Brazilian, North American, Mexican, European and Argentine creators of the films and their visions of Amazonia, as well as the audiences and markets to which the films are intended.

0101	Janet Chernela	Seats (Total: 30)
	Tu 6:00pm - 8:45pm	WDS 0104

ANTH468I Special Topics in Cultural Anthropology; Language as Practice

Credits: 3 Grading Method: Regular, General Education: DVUP
Pass-Fail, Audit

Advanced courses in varying specialty areas of cultural anthropology that respond to new theoretical developments, faculty research interests, or specialties of visiting scholars.

0101	Janet Chernela	Seats (Total: 20)
	Tu 2:00pm - 4:45pm	PHY 1201

ANTH476

Senior Research

(Perm req)

Credits: 3-4

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in Anthropology program. Credit only granted for: ANTH476 or ANTH486.

Capstone course in which students pursue independent research into a current problem in anthropology, selected with assistance of a committee of faculty. Research leads to the writing of a senior thesis in anthropology.

Contact department for information to register for this course.

ANTH477

Senior Thesis

(Perm req)

Credits: 3-4

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ANTH476. Restriction: Permission of BSOS-Anthropology department; and must be in Anthropology program. Credit only granted for: ANTH477 or ANTH487.

Capstone course in which students write a senior thesis on independent research into a current problem in anthropology. The thesis is defined before a committee of faculty.

Contact department for information to register for this course.

ANTH485

Honors Research Preparation

(Perm req)

Credits: 3

Grading Method: Regular

Restriction: Permission of BSOS-Anthropology department; and must be in Anthropology program; and must be admitted to University Honors Program or Anthropology Honors Program.

Honors Research Preparation is an independent study course during which the Honors candidate will work with their Honors Thesis Advisor to establish not only the structure of the thesis and timeline, but also the formation of Thesis Review Committee.

Contact department for information to register for this course.

ANTH486

Honors Research

(Perm req)

Credits: 3-4

Grading Method: Regular

Restriction: Permission of BSOS-Anthropology department; and must be in Anthropology program; and must be admitted to University Honors Program or Anthropology Honors Program. Credit only granted for: ANTH486 or ANTH476.

Capstone course in which students pursue independent research into a current problem in anthropology, selected with assistance of a committee of faculty. Research leads to the writing of an honors thesis in anthropology.

Contact department for information to register for this course.

ANTH487**Honors Thesis**

(Perm req)

Credits: 3-4 Grading Method: Regular

Prerequisite: ANTH486. Restriction: Permission of BSOS-Anthropology department; and must be in Anthropology program; and must be admitted to University Honors Program or Anthropology Honors Program. Credit only granted for: ANTH487 or ANTH477.

Capstone course in which students write a thesis on the results of independent research into a current problem in anthropology.

Contact department for information to register for this course.

ANTH601**Applied Anthropology**

Credits: 3 Grading Method: Regular

An overview of the history and current practices of applied anthropology. This includes relationships between applied anthropology and other major subfields of the profession; the interdisciplinary and public context of applied anthropology; and problems of significance, utility, and ethics associated with applied anthropology.

Offered fall only. For ANTH majors only.

0101	Michael Paolisso	Seats (Total: 20)
	Tu 4:00pm - 6:40pm	PLS 1162

ANTH605**Anthropology of Human Rights**

Credits: 3 Grading Method: Regular

Credit only granted for: ANTH405 or 605.

Examines human rights through four policy domains: inequality, migration, indigenous resource rights, and climate change. Combines fine-grained, ethnographic accounts with consideration of international human rights institutions and practices to weigh the strengths and limitations of a human rights framework for achieving social justice.

0101	Robert Winthrop	Seats (Total: 10)
	MW 2:00pm - 3:15pm	KEY 1117

Qualitative Methods in Applied Anthropology

Offered fall only. Restricted to Anthropology majors only.

0101	Thurka Sangaramoorthy	Seats (Total: 20)
	W 4:00pm - 6:40pm	KEY 1117

Health Disparities in the United States

Powerful economic, political, social, and cultural forces shape who gets sick, what illnesses/diseases they get, how they are treated while seeking care, what treatment options they have, and what their ultimate health outcomes are. The goal of the course is to understand these processes through the lens of critical medical anthropology

0101	Christina Getrich	Seats (Total: 5)
	TuTh 11:00am - 12:15pm	WDS 1114

Advanced Studies in Global Health

Extends understandings of diverse health conditions facing world populations today and the science being made around them. Critically examines key issues in global aid and public health, with an emphasis on the theories, concepts, and methods of anthropology.

0101	Thurka Sangaramoorthy	Seats (Total: 10)
	M 12:00pm - 2:45pm	WDS 0104

Environment and Society

Credits: 3 Grading Method: Regular,
Audit

Students will obtain foundational knowledge of core social science theories and approaches dealing with coupled natural-human systems. Key topics include: cultural models of the environment, social networks, ecological economics, political ecology, environmental justice, and science communication.

0101	Michael Paolisso, William Dennison	Seats (Total: 20)
	Th 2:00pm - 4:45pm	HJP 1213B

ANTH629M Advanced Developments in Biological Anthropology; True Storytelling & Narratives of Cultural Identity

Credits: 3 Grading Method: Regular,
Audit

Graduate biological anthropology courses on varying topics derived from new interests of the faculty or the specialties of visiting scholars.

Cross-listed with AMST629M and THET608I. Credit granted for THET608I, ANTH629M, or AMST629M.

0101	Laurie Frederik	Seats (Total: 5)
	M 3:00pm - 5:30pm	PAC 2740

ANTH633 Archaeology of Slavery: Classical, Caribbean and North American Contexts

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: ANTH433 or ANTH633.

Has slavery always existed? Does it come and go? North American plantation archaeology has become one of the foundations for understanding African American culture from the 1960s. Slavery in Antiquity existed in Greece and Rome on large scales and was essential to making commercial agriculture profitable work. Slavery in the Caribbean showed Europeans how to make a profit from African bodies. Trafficking in human persons today is recorded by the U.S. State Department annually and is regarded as modern slavery. These varying contexts of slavery will be compared in an attempt to understand slavery scientifically.

0101	Mark Leone	Seats (Total: 10)
	M 2:00pm - 4:45pm	ESJ B0320

ANTH636 Norse Archaeology

Credits: 3 Grading Method: Regular,
Audit, Sat-Fail

The archaeology of the Norse world from the 8th century through to the end of the 11th century. We will investigate the possible causes of the Norse expansion out of Scandinavia. The various settlements and colonies of Norse Russia, the Baltic, Britain, Ireland and the North Atlantic Islands (Orkney, the Shetlands, the Faroes, Iceland, Greenland and Newfoundland) will be examined. While we will look at the Norse in detail we will also attempt to put their raiding, trading, and settlements into a larger Eurasian context through a study of the archaeology of this period.

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ANTH240; or permission of instructor. Credit only granted for: ANTH653, ANTH448Q or ANTH453. Formerly: ANTH448Q.

An overview of how social scientists, in particular historical archaeologists, approach modern cities as being part of the materiality of the social structure and order.

0101	Stephen Brighton	Seats (Total: 2)
	TuTh 3:30pm - 4:45pm	WDS 1130

ANTH654 Political Ecology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: ANTH454 or ANTH654.

The use of the environment is contested and negotiated within historic and contemporary societies. Incorporating methods and perspectives from across the social sciences through specific case studies in the Americas, Europe, Asia and Africa, this course offers a survey to coupled human-environmental systems.

0101	Yancey Orr	Seats (Total: 10)
	M 4:00pm - 6:45pm	KEY 1117

ANTH655 Introduction to Museum Scholarship

Credits: 3 Grading Method: Regular,
Audit

Cross-listed with AMST655, HIST610. Credit only granted for: ANTH655, AMST655, or HIST610.

Provides students a basic understanding of museums as cultural and intellectual institutions. Topics include the historical development of museums, museums as resources for scholarly study, and the museum exhibition as medium for presentation of scholarship.

0101	Diana Marsh	Seats (Total: 15)
	W 7:00pm - 9:45pm	WDS 1127

ANTH688A Current Developments in Anthropology

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Detailed investigation of a current problem or research technique, the topic to be chosen in accordance with faculty interests and student needs.

Contact department for information to register for this course.

ANTH688I Current Developments in Anthropology; Language as Practice

Credits: 3 Grading Method: Regular,
 Audit

Detailed investigation of a current problem or research technique, the topic to be chosen in accordance with faculty interests and student needs.

0101	Janet Chernela	Seats (Total: 10)
	Tu 2:00pm - 4:45pm	PHY 1201

ANTH688O Current Developments in Anthropology; Ethnography and Performance

Credits: 3 Grading Method: Regular,
 Audit

Detailed investigation of a current problem or research technique, the topic to be chosen in accordance with faculty interests and student needs.

Cross-listed with THET614 and AMST629P. Credit granted for THET614, AMST629P, or ANTH688O.

0101	Laurie Frederik	Seats (Total: 10)
	Tu 2:00pm - 4:30pm	PAC 2515C

ANTH689A Special Problems in Anthropology

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ANTH701 Anthropology Internship Preparation

Credits: 3 Grading Method: Regular,
 Audit

Preparation for internship includes practicum training in development, presentation and evaluation of position papers, proposals and work plans; literature search and use of secondary data sources in decision making the effect cultural analysis and resource management; ethics and professional development for work in non-academic settings.

Contact department for information to register for this course.

ANTH712 Anthropology Internship Analysis

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ANTH789.

The preparation and presentation of internship results, and the development of skills in report writing and presentation. Includes the completion of a professional quality report or publishable paper based on the internship experience.

Contact department for information to register for this course.

ANTH741 Introduction to Cultural and Heritage Resource Management

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be in the Cultural and Heritage Resource Management Program (CHRM); or by permission of the Anthropology department.

An introduction to the field of cultural and heritage resource management. Examines existing international, national, and local frameworks for the protection of cultural heritage. Provides an overview of employment opportunities and ethical responsibilities within the profession.

PLA1	Matthew Palus	Seats (Total: 20)
	Meets August 26, 2019 - November 15, 2019	
	Class time/details on ELMs	ONLINE
	<i>Must be in Cultural & Heritage Resource Management Program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.</i>	

ANTH742 Vital Technologies: Methods, Applications, and Interpretation

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be in the Cultural and Heritage Resource Management Program (CHRM); or by permission of the Anthropology department.

An examination of the range of nondestructive technologies used to research and image cultural and heritage resources. Standard archaeological survey methods will be covered and will focus on remote sensing technologies and how an integrated approach to archaeological investigation can reveal vital information for resource planning, interpretation, and outreach.

PLA1	Matthew Edwards	Seats (Total: 20)
	Meets August 26, 2019 - November 15, 2019	
	Class time/details on ELMs	ONLINE
	<i>Must be in Cultural & Heritage Resource Management program For permission to enroll, contact oes@umd.edu.</i>	

Development of Social/Cultural Theory

A broad perspective of the history of social cultural theory in anthropology and the critical skills needed for understanding the subdiscipline is provided. An overview of the history of theorizing about society and culture will help outline the past, present, and future of anthropology and its relations with other scientific and humanistic disciplines.

0101	Kathryn Lafrenz Samuels	Seats (Total: 20)
	M 4:00pm - 6:40pm	JMZ 1215

Internship Research

This course augments ANTH 789 and is graded in conjunction with it.

Contact department for information to register for this course.

Internship

Individual instruction course supervised by a department faculty member.

Contact department for information to register for this course.

Museum Scholarship Practicum

Prerequisite: AMST856, ANTH856, or HIST810. Restriction: Permission of Museum Scholarship Program required. Cross-listed with HIST811, AMST857. Credit only granted for: AMST857, ANTH857, or HIST811.

0101	Mary Alexander	Seats (Total: 3)
	Contact instructor or department for details.	
0401	Mary Sies	Seats (Total: 2)
	Contact instructor or department for details.	

0901	Ricardo Punzalan	Seats (Total: 2)
Contact instructor or department for details.		

ANTH898

Pre-Candidacy Research

(Perm req)

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

ANTH899

Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

AOSC

Atmospheric and Oceanic Science

Fall 2019

AOSC123

Causes and Implications of Global Change

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSNS, SCIS

Cross-listed with GEOL123. Credit only granted for: AOSC123, GEOG123, GEOL123, or METO123. Formerly: METO123.

Responsible policy and decision making on issues related to the global environment requires understanding of the basic scientific issues, relationships between the geophysical and biological sciences, the impacts on regional and global endeavors, and the political manner in which humans respond. This course embodies an integrated introduction to the broad scientific and social aspects of the global change problem.

0101	Rachel Pinker	Seats (Total: 32)
	MW 12:00pm - 12:50pm	ATL 2416
	F 12:00pm - 12:50pm	ATL 2416 Discussion

AOSC200

Weather and Climate

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSNL (if taken with AOSC201), DSNS, SCIS

Prerequisite: MATH107, MATH110, or MATH115. Recommended: Concurrent enrollment in AOSC201. Formerly: METO200.

Broad survey of the state of knowledge and problems of atmospheric science. Origin and structure of the atmosphere, meteorological observations, weather maps, forecasting, satellites, energetics, wind, general circulation, storms, severe weather, climate change, air pollution.

0101	Timothy Canty TuTh 12:30pm - 1:45pm W 1:00pm - 1:50pm	Seats (Total: 30) ATL 2324 ATL 2428	Discussion
0102	Timothy Canty TuTh 12:30pm - 1:45pm W 2:00pm - 2:50pm	Seats (Total: 30) ATL 2324 CHM 0127	Discussion
0103	Timothy Canty TuTh 12:30pm - 1:45pm W 3:00pm - 3:50pm	Seats (Total: 30) ATL 2324 ATL 2330	Discussion
0104	Timothy Canty TuTh 12:30pm - 1:45pm W 2:00pm - 2:50pm <i>This section is restricted to students in Carillon Communities.</i>	Seats (Total: 0) ATL 2324 PLS 1111	Discussion
0201	Timothy Canty TuTh 2:00pm - 3:15pm W 2:00pm - 2:50pm	Seats (Total: 30) ATL 2324 SPH 0307	Discussion
0202	Timothy Canty TuTh 2:00pm - 3:15pm W 3:00pm - 3:50pm	Seats (Total: 30) ATL 2324 CHM 0127	Discussion
0203	Timothy Canty TuTh 2:00pm - 3:15pm M 1:00pm - 1:50pm	Seats (Total: 30) ATL 2324 CHM 0127	Discussion
0204	Timothy Canty TuTh 2:00pm - 3:15pm M 2:00pm - 2:50pm	Seats (Total: 30) ATL 2324 ATL 2416	Discussion

AOSC201

Weather and Climate Laboratory

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

CORE: PL

General Education: DSNL

Corequisite: AOSC200. Formerly: METO201.

Laboratory exercises to supplement AOSC200, including weather observations, weather map analysis, use of the Internet, forecasting practice and climate modeling.

Students must pay a \$60.00 laboratory materials fee.

0101	Austin Hope Tu 3:30pm - 5:30pm	Seats (Total: 26) ATL 3426	Lab
0102	Joseph Knisely W 10:00am - 12:00pm	Seats (Total: 26) ATL 3426	Lab
0103	Justin Hicks F 10:00am - 12:00pm	Seats (Total: 26) ATL 3426	Lab
0104	Joseph Knisely W 4:00pm - 6:00pm	Seats (Total: 26) ATL 3426	Lab
0105	Lindsey Rodio M 2:00pm - 4:00pm	Seats (Total: 26) ATL 3426	Lab
0106	Austin Hope Tu 10:00am - 12:00pm	Seats (Total: 26) ATL 3426	Lab
0107	Lindsey Rodio M 10:00am - 12:00pm	Seats (Total: 26) ATL 3426	Lab
0108	Justin Hicks F 2:00pm - 4:00pm	Seats (Total: 26) ATL 3426	Lab

AOSC375

Introduction to the Blue Ocean

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with GEOL375. Credit only granted for: GEOL375 or METO375.

Oceans are an important component of the Earth System and this course builds towards Earth System Science education. Oceanography is an intrinsically interdisciplinary subject with strong connections to astronomy (tidal forces), biology (ecosystems), geography (world climate), geology (sea floor tectonics), and physics (waves). We begin with the history of ocean exploration and origin of Earth and life and learn about properties of seawater, air-sea interactions, atmospheric and oceanic circulation, El Nino-Southern Oscillation, waves, tides, and tsunamis.

0101	Jose-Henrique Alves	Seats (Total: 23)
	TuTh 11:00am - 12:15pm	ATL 2428

AOSC400 Physical Meteorology of the Atmosphere

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (PHYS171, PHYS161, MATH141); or permission of CMNS-Atmospheric & Oceanic Science department. Formerly: METO400.

The application of basic classical physics, chemistry and mathematics to the study of the atmosphere. Composition of the atmosphere; energy sources and sinks (radiation in the atmosphere; radiative balance and radiative forcing of atmospheric processes); atmospheric thermodynamics; clouds and precipitation physics; atmospheric electricity and optics; mesoscale processes (e.g., orographic mesoscale phenomena and instabilities); air mass boundaries; severe weather, tropical cyclones; storms; global circulation.

0101	Patrick Meyers	Seats (Total: 32)
	TuTh 11:00am - 12:15pm	ATL 2416

AOSC420 Physical Oceanography

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH141 and PHYS141. Recommended: AOSC200. Also offered as: GEOL670, AOSC670. Credit only granted for: AOSC420, AOSC670, or GEOL670.

Ocean observations. Water masses, sources of deep, intermediate, and surface water. Mass, heat, and salt transport, and the meridional overturning circulation. Geochemical tracers and cycles, including carbon. Western boundary currents, mixed layers, and processes maintaining the thermocline. Coastal and estuarine processes. Surface waves and tides. the ocean's role in climate.

0101	James Carton	Seats (Total: 12)
	MW 3:15pm - 4:30pm	ATL 2416

AOSC431 Atmospheric Thermodynamics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (PHYS171, PHYS161, MATH141). Recommended: MATH246. Credit only granted for: AOSC431 or METO431. Formerly: METO431.

Classical thermodynamics applied to both the dry and the moist atmosphere. Composition; phase changes of water; stability concepts; Properties of aerosols and clouds, cloud nucleation and precipitation processes, atmospheric electricity, cloud and precipitation chemistry.

0101	Ning Zeng	Seats (Total: 25)
	TuTh 9:30am - 10:45am	ATL 2416
AM01	Ning Zeng	Seats (Total: 1)
	TuTh 9:30am - 10:45am	ATL 2416

AOSC458T

(Perm req)

Advanced Topics in Atmospheric and Oceanic Science; Broadcast Meteorology

Credits: 3

Grading Method: Regular,
Audit

Special topics in atmospheric and oceanic science are given intensive study. The topic of concentration varies, from semester to semester and depends on student and faculty interests. Often, specialists from other institutions are invited to the campus on a visiting lectureship basis to conduct the course.

0101	Somara Theodore	Seats (Total: 12)
	TuTh 2:00pm - 3:15pm	ATL 3408

AOSC470

Synoptic Meteorology

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in AOSC431 and AOSC432. Credit only granted for: AOSC470, AOSC600, or METO600.

Atmospheric properties and observations, meteorological analysis and charts, operational numerical forecasts. Application of quasigeostrophic theory, baroclinic instability, midlatitude and mesoscale weather systems. Tropical meteorology. Weather forecasting using numerical and statistical models. Prediction of weather phenomena on the global, syoptic, meso, and local scales. Analysis of surface and upper air data; Norwegian cyclone model; introduction to weather forecasting.

0101	Jonathan Poterjoy	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ATL 2428

AOSC493

Senior Research Project I

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Permission of CMNS-Atmospheric & Oceanic Science department. Restriction: Must be in Atmospheric and Oceanic Science program; or permission of instructor.

Technical writing and oral presentation skills. Planning, writing, and presenting a plan for research in the geosciences.

0101	Timothy Canty	Seats (Total: 10)
	M 2:00pm - 3:00pm	ATL 3408
	F 2:00pm - 3:30pm	ATL 3408

AOSC494 Atmospheric and Oceanic Science Seminar

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in AOSC431 and AOSC432.

Exposure to a wide range of contemporary topics in atmospheric, oceanic, and climate sciences, to foster research interests and promote critical thinking through the weekly AOSC departmental seminar series.

0101	Derrick Lampkin	Seats (Total: 20)
	Th 3:30pm - 5:00pm	ATL 2400

AOSC499 Special Problems in Atmospheric Science

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Research or special study in the field of meteorology and the atmospheric and oceanic sciences.

Contact department for information to register for this course.

AOSC600 Synoptic Meteorology I

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: AOSC610. Credit only granted for: AOSC470 or AOSC600. Formerly: METO600.

Atmospheric properties and observations, meteorological analysis and charts, operational numerical forecasts. Application of quasigeostrophic theory, baroclinic instability, midlatitude and mesoscale weather systems. Tropical meteorology.

0101	Jonathan Poterjoy	Seats (Total: 10)
	TuTh 12:30pm - 1:45pm	ATL 2428
AM01	Jonathan Poterjoy	Seats (Total: 1)
	TuTh 12:30pm - 1:45pm	ATL 2428

AOSC610 Dynamics of the Atmosphere and Ocean I

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: Must have completed or be concurrently enrolled in MATH462; or students who have taken courses with comparable content may contact the department. Formerly: METO610.

Equations of motion and their approximation, scale analysis for the atmosphere and the ocean. Conservation properties. Fluid motion in the atmosphere and oceans. Circulation and vorticity, geostrophic motion and the gradient wind balance. Turbulence and Ekman Layers.

0101	Sumant Nigam	Seats (Total: 30)
	TuTh 9:30am - 10:45am	ATL 2428
AM01	Sumant Nigam	Seats (Total: 1)
	TuTh 9:30am - 10:45am	ATL 2428

AOSC614 Atmospheric Modeling, Data Assimilation and Predictability

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: AOSC610; or permission of instructor.

Solid foundation for atmospheric and oceanic modeling and numerical weather prediction: numerical methods for partial differential equations, an introduction to physical parameterizations, modern data assimilation, and predictability.

0101	Eugenia Kalnay	Seats (Total: 20)
	W 10:00am - 12:30pm	ATL 3400
AM01	Eugenia Kalnay	Seats (Total: 1)
	W 10:00am - 12:30pm	ATL 3400

AOSC620 Physics and Chemistry of the Atmosphere I

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: MATH461; or students who have taken courses with comparable content may contact the department. Formerly: METO620.

Air parcel thermodynamics and stability; constituent thermodynamics and chemical kinetics. Cloud and aerosol physics and precipitation processes.

0101	Russell Dickerson	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	ATL 2416
AM01	Russell Dickerson	Seats (Total: 1)
	TuTh 2:00pm - 3:15pm	ATL 2416

AOSC652 Analysis Methods in Atmospheric and Oceanic Science

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: PHYS141 and MATH241; or students who have taken courses with comparable content may contact the department. Recommended: AMSC460, CMSC660, AMSC660, or CMSC460.

A variety of the analysis methods used by atmospheric and oceanic scientists will be applied to observational data sets such as Vostok ice core record, temperature trends, and satellite measurements of ozone, sea ice, etc. in a hands-on, computer laboratory setting. Students will be exposed to Fortran and Python as well as modern file formats such as HDF and netCDF. No prior programming experience required.

0101	Jeffrey Henrikson	Seats (Total: 24)
	MWF 12:45pm - 1:50pm	ATL 3426
0201	Jeffrey Henrikson	Seats (Total: 30)
	Class time/details on ELMs	ONLINE
AM01	Jeffrey Henrikson	Seats (Total: 1)
	MWF 12:45pm - 1:50pm	ATL 3426
AM02	Jeffrey Henrikson	Seats (Total: 1)
	Class time/details on ELMs	ONLINE

AOSC658I Special Topics in Meteorology; Practicum in Atmospheric and Oceanic Science

(Perm req)

Credits: 1-3 Grading Method: Regular,
 Audit

Various special topics in meteorology are given intensive study. The topic of concentration varies, from semester to semester and depends on student and faculty interests. Often, specialists from other institutions are invited to the campus on a visiting lectureship basis to conduct the course.

Contact department for information to register for this course.

AOSC670 Physical Oceanography

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of CMNS-Atmospheric & Oceanic Science department; or permission of CMNS-Geology department. Jointly offered with AOSC420, GEOL670. Credit only granted for: GEOL670, AOSC670 or AOSC420.

Ocean observations. Water masses, sources of deep water. Mass, heat, and salt transport, geochemical tracers. Western boundary currents, maintenance of the thermocline. Coastal and estuarine processes. Surface waves and tides. Ocean climate.

0101	James Carton	Seats (Total: 11)
	MW 3:15pm - 4:30pm	ATL 2416
AM01	James Carton	Seats (Total: 1)
	MW 3:15pm - 4:30pm	ATL 2416

AOSC680 Introduction to Earth System Science

Credits: 3 Grading Method: Regular,
Audit

An introduction to the study of the earth as a system: atmosphere, oceans, land, cryosphere, solid earth, and humans. Cycling of materials and energy in the earth system: the energy cycle, the hydrologic cycle, the carbon cycle, the nitrogen cycle. Climate processes and variability: land-atmosphere, ocean-atmosphere, biosphere-climate, and human interactions, short- and long-term variability in climate.

0101	Fernando Miralles-Wilhelm	Seats (Total: 20)
	MW 5:00pm - 6:15pm	ATL 2416
AM01	Fernando Miralles-Wilhelm	Seats (Total: 1)
	MW 5:00pm - 6:15pm	ATL 2416

AOSC798 Directed Graduate Research

Credits: 1-3 Grading Method: Sat-Fail
Contact department for information to register for this course.

AOSC898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular, Sat-Fail
Contact department for information to register for this course.

AOSC899**Doctoral Dissertation Research**

(Perm req)

Credits: 6

Grading Method: Sat-Fail

Contact department for information to register for this course.

ARAB**Arabic****Fall 2019**

ARAB104**Elementary Modern Standard Arabic I-II**

Credits: 6

Grading Method: Regular,
Pass-Fail*Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a fluent/native speaker of Arabic.**An intensive course focusing on developing functional proficiency in the standard Arabic language, both written and formal spoken. Begins with script and phonology, and develops into a limited range of situation-based texts and topics that build vocabulary, grammar, general communicative competence and cultural awareness.*

Seats will be opened gradually by the registrar's office, to a total of 15 seats per section.

0101	Samah Al-salami	Seats (Total: 15)
	MWF 10:00am - 11:50am	HJP 2118
0301	Lutf Alkebsi	Seats (Total: 15)
	MWF 12:00pm - 1:50pm	HJP 2118
0401	Samah Al-salami	Seats (Total: 15)
	MWF 1:00pm - 2:50pm	JMZ 0120
FC01	Ahmed Hanafy	Seats (Total: 12)
	MTuWTh 3:00pm - 4:15pm	HJP 3142
	<i>Restricted to students in Freshman Connection.</i>	

ARAB204**Intermediate Modern Standard Arabic I**

Credits: 6

Grading Method: Regular,
Pass-Fail, Audit

CORE: HO

*Prerequisite: ARAB105; and must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a fluent/native speaker of Arabic.**Covers topics related to contemporary Arabic society, literature and culture in standard written and formal spoken Arabic. Acquisition of more complex grammatical structures, expanding vocabulary, and reading, to develop a better understanding of the formal aspects of using MSA.*

0101	Ahmed Hanafy	Seats (Total: 15)
	MWF 12:00pm - 1:50pm	HJP 3142
0201	Ahmed Hanafy	Seats (Total: 15)
	MWF 10:00am - 11:50am	HJP 3142

ARAB206 Egyptian Colloquial Arabic I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ARAB205; or permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must not be a fluent/native speaker of Arabic.

Develops communicative skills and cultural knowledge in Egyptian Arabic. Focuses on various social interactions, work and school situations, as well as specifics of pronunciation and grammar of the Egyptian dialect. Designed for students who have completed two years of the regular Arabic sequence classes (104-105 and 204-205) or equivalent.

Prerequisite: ARAB205.

0101	Valerie Anishchenkova	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	HJP 2118

ARAB207 Egyptian Colloquial Arabic II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ARAB206; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a fluent/native speaker of Arabic.

Further develops communicative skills and cultural knowledge in Egyptian Arabic, extending range of contexts and types of social interaction. Focuses on various aspects of Egyptian popular culture.

Contact department for information to register for this course.

ARAB304 Advanced Modern Standard Arabic I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ARAB205; or permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must not be a fluent/native speaker of Arabic. Formerly: ARAB301.

Advanced grammar, reading, writing, speaking in Arabic; study of contemporary Arabic society, politics, and culture.

0101	Muna Husain	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	HJP 2118
	F 2:00pm - 2:50pm	HJP 2118 Lab
0201	Lutf Alkebsi	Seats (Total: 15)
	MW 3:00pm - 4:15pm	JMZ 0120
	F 3:00pm - 3:50pm	JMZ 2122 Lab

ARAB386 Experiential Learning

Credits: 3-6 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of ARHU-School of Languages, Literatures, and Cultures department.

Pre-professional experience in research, analysis and writing in a work setting. Project proposal approved by faculty and internship sponsor. Junior standing.

Contact department for information to register for this course.

ARAB399 Independent Study In Arabic

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Research and writing or specific readings on a topic selected by the student and supervised by a faculty member on the Department of Arabic Studies. To be planned during semester preceding registration.

Contact department for information to register for this course.

ARAB401 Readings in Arabic Literature

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ARAB305; or permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must not be a fluent/native speaker of Arabic.

A survey of Modern Arabic literature is given through a range of selected texts. Texts are studied as literature with constant reference to the social, cultural and political contexts in which they were written. Taught in Arabic.

0101	Muna Husain	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	JMZ 1224

ARAB499A Special Topics in Arabic Studies; Roots and Patterns: Verb Meaning in Arabic

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

In-depth study of particular aspect of Arabic culture, literature and language. Specific topic to be announced when course is offered.

Prerequisite: ARAB205. Exploration of the derivational morphology of Arabic focusing primarily on the verb patterns and the meanings they convey. Students who are curious about the roots and patterns of Arabic should take this course. Taught in English and Arabic.

0101	Peter Glanville	Seats (Total: 15)
	MW 3:00pm - 4:15pm	HJP 2118

ARAB499X Special Topics in Arabic Studies; Yemen: Land of War and Peace

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

In-depth study of particular aspect of Arabic culture, literature and language. Specific topic to be announced when course is offered.

Prerequisite: ARAB305 and permission of department. A survey of cultural history of Yemen, including various modes of cultural production such as literature, media, film, music, popular art, and material culture. The course also offers the basics of the Yemeni dialect of Arabic. Taught in Arabic.

0101	Lutf Alkebsi	Seats (Total: 15)
	TuTh 9:30am - 10:45am	JMZ 3118

ARAB628A Special Topics in Arabic Studies; Arabic Audiovisual Discourses

Credits: 3 Grading Method: Regular,
Audit

In-depth study of a particular aspect of Arabic Studies. Topics to be announced when course is offered. Taught in Arabic.

Contact department for information to register for this course.

ARCH Architecture Fall 2019

ARCH170 Design Thinking and Architecture

Credits: 3 Grading Method: Regular, CORE: HA General Education: DSHU
Pass-Fail, Audit

Examines conceptual, perceptual, behavioral, and technical aspects of the built environment, and methods of analysis, problem-solving, and design implementation.

0101	Siobhan Steen W 9:00am - 9:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 19) ARC 0204 ONLINE ARC 1101	Discussion
0102	Siobhan Steen W 9:00am - 9:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 19) ARC 0204 ONLINE ARC 1103	Discussion
0103	Siobhan Steen W 9:00am - 9:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 19) ARC 0204 ONLINE ARC 1105	Discussion
0104	Siobhan Steen W 9:00am - 9:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 19) ARC 0204 ONLINE ARC 1123	Discussion
0105	Siobhan Steen W 9:00am - 9:50am Class time/details on ELMs F 12:00pm - 12:50pm	Seats (Total: 19) ARC 0204 ONLINE ARC 1101	Discussion
0106	Siobhan Steen W 9:00am - 9:50am Class time/details on ELMs F 12:00pm - 12:50pm	Seats (Total: 19) ARC 0204 ONLINE ARC 1103	Discussion
FC01	Betsy Petrusic TuTh 7:30pm - 8:45pm <i>Restricted to students in Freshman Connection.</i>	Seats (Total: 18) ARC 1105	

ARCH171

Design Thinking and Making in Architecture

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP

Restriction: Must be in a major in ARCH-Architecture Program.

Examines iterative design processes and critical thinking skills through active learning and design thinking methodologies to solve problems and apply design as a lens of inquiry and exploration. Students will understand Design Thinking through interactive and experiential learning.

0101	Elijah Northen	Seats (Total: 50)
	TuTh 11:00am - 12:15pm	Location: TBA
0102	Alex Donahue	Seats (Total: 50)
	TuTh 12:30pm - 1:45pm	Location: TBA

ARCH201 Elements and Principles of Architecture

(Perm req)

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in a major in ARCH-Architecture Program.

Survey of fundamental elements and principals of architecture and architectural education. Frames study of architecture as a profession, discipline and critical practice.

0101	Brian Kelly, Sarah Fuller, Leah Clark	Seats (Total: 90)
	M 11:00am - 11:50am	Location: TBA

ARCH226 History of World Architecture II

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHU

Post-1500 - History of Architecture survey course - History of Architecture structured to develop critical thinking and visually literacy with regard to the worldwide legacy of design thinking and building innovation in architecture

0101	Juan Burke	Seats (Total: 120)
	TuTh 9:30am - 10:45am	Location: TBA

ARCH270 Design in Practice

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP,
SCIS

Case studies and hands-on design projects ranging in scale from a product to a building to give students insight into the process by which architects work both individually and collaboratively to put disciplinary knowledge and expertise into practice to shape our built environment.

*A Fearless Ideas Course from the Academy for Innovation & Entrepreneurship (AIE):
<http://ter.ps/iamFEARLESS> Click here for more information on the Fearless Ideas Courses.*

0101	Madlen Simon	Seats (Total: 90)
	TuTh 2:00pm - 3:15pm	ARC 0204

ARCH271 People, Planet, and Profit: Building Sustainable Places

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Cross-listed with RDEV250. Credit only granted for: ARCH271 or RDEV250.

An introduction to the four disciplines represented in the School: architecture and urban design, community planning, historic preservation, and real estate development, that work to create a more sustainable environment for the future to create a more sustainable environment for the future using our interpretation of the quadruple bottom line: socio-cultural, economic, environmental, and design sustainability. Students will be provided with an understanding of the fundamental scholarship and processes of each of these disciplines and examine the intersections between them. Additionally, they will learn by applying the approaches of the four disciplines through a series of field studies.

0101	Georgeanne Matthews	Seats (Total: 90)
	TuTh 3:30pm - 4:45pm	ESJ 1224

ARCH300 Design Media and Representation II

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ARCH200; or permission of ARCH-Architecture Program. Restriction: Must be in a major in ARCH-Architecture Program.

Study of architectural representation in physical and digital design media. Examine visual communications and speculative visual studies through applied drawing, modeling and making to explore expanded roles of representation in design and design thinking.

0101	Michael Abrams, Matthew Geiss	Seats (Total: 20)
	W 8:00am - 9:50am	Location: TBA
	W 10:00am - 11:50am	Location: TBA Discussion
0102	Matthew Geiss, Michael Abrams	Seats (Total: 20)
	W 8:00am - 9:50am	Location: TBA
	W 12:00pm - 1:50pm	Location: TBA Discussion
0103	Matthew Geiss, Michael Abrams	Seats (Total: 20)
	W 8:00am - 9:50am	Location: TBA
	W 10:00am - 11:50am	Location: TBA Discussion

0104	Michael Abrams, Matthew Geiss W 8:00am - 9:50am W 12:00pm - 1:50pm	Seats (Total: 20) Location: TBA Location: TBA	Discussion
0105	Matthew Geiss, Michael Abrams W 8:00am - 9:50am W 10:00am - 11:50am	Seats (Total: 20) Location: TBA Location: TBA	Discussion
0106	Michael Abrams, Matthew Geiss W 8:00am - 9:50am W 12:00pm - 1:50pm	Seats (Total: 20) Location: TBA Location: TBA	Discussion
0107	Michael Abrams, Matthew Geiss W 8:00am - 9:50am W 10:00am - 11:50am	Seats (Total: 20) Location: TBA Location: TBA	Discussion
0108	Michael Abrams, Matthew Geiss W 8:00am - 9:50am W 12:00pm - 1:50pm	Seats (Total: 20) Location: TBA Location: TBA	Discussion

ARCH386

Experiential Learning

(Perm req)

Credits: 1-6

Grading Method: Regular,
Pass-Fail

General Education: DSSP

Restriction: Must have learning proposal approved by faculty sponsor and student's internship sponsor; and sophomore standing or higher; and permission of ARCH-Architecture Program.

Learning experience tied to internship of specified duration with targeted learning outcomes.

0101	Instructor: TBA Contact instructor or department for details.	Seats (Total: 10)
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ARCH401

Architecture Design Studio II

(Perm req)

Credits: 6

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ARCH400. Restriction: Must be in Architecture (B.S.) program.

Continuation of ARCH 400 with introduction to building typology, urban and contextual issues, design of the vertical surface, and architectural interiors.

0101	Michael Abrams	Seats (Total: 14)
	MWF 2:00pm - 6:00pm	Location: TBA
0105	Georgeanne Matthews	Seats (Total: 15)
	MWF 2:00pm - 6:00pm	Location: TBA

ARCH403

Architecture Design Studio IV

(Perm req)

Credits: 6

Grading Method: Regular,
Pass-Fail, Audit

General Education: FSOC

Prerequisite: Minimum grade of C- in ARCH402. Restriction: Must be in Architecture (B.S.) program.

Investigations into the relationship between the man-made and the natural world including introductory issues of assembly and material value. Design of the site and the building are combined into an integral process delimiting and probing the boundaries of each and exploring their reciprocal relationship. The architect's obligations to the natural and urban contexts are explored in many dimensions including historical, typological, environmental, and physical.

0101	Brittany Williams	Seats (Total: 54)
	MWF 2:00pm - 6:00pm	Location: TBA

ARCH404

Graduate Architecture Design Studio I

(Perm req)

Credits: 6

Grading Method: Regular,
Audit

Recommended: For 3 1/2 year graduate students only. Restriction: Must be in Architecture (Master's) program.

Introduction to architectural design with particular emphasis on conventions and principles of architecture , visual and verbal communication skills, formal analysis, design process, spatial composition, architectural promenade, basic program distribution, and elementary constructional and environmental responses. Offered fall only.

0101	Lindsey May	Seats (Total: 12)
	MWF 2:00pm - 6:00pm	Location: TBA

ARCH406

Graduate Architecture Design Studio III

(Perm req)

Credits: 6

Grading Method: Regular,
Audit

Prerequisite: Minimum grade of C- in ARCH405. Restriction: Must be in Architecture (Master's) program.

Investigations into the relationship between the man-made and the natural world including introductory issues of assembly and material value. Design of the site and the building are combined into an integral process delimiting and probing the boundaries of each and exploring their reciprocal relationship. The architect's obligations to the natural and urban contexts are explored in many dimensions including historical, typological, environmental, and physical.

0101	James Tilghman	Seats (Total: 16)
	MWF 2:00pm - 6:00pm	Location: TBA

ARCH418B Selected Topics in Architectural Technology; Potentials of Earth Construction Technologies

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Selected Topics in Architectural Technology

Earth structures have been a part of our architectural language for as long as we can trace human occupation. Sustainable by nature, beautiful and easily accessible for labor, this building technique has been on the rise in the last decades. This seminar will look at past and present earth construction techniques in order to propose potential future effects. Students will research construction methodologies from around the world with techniques including, but not limited to, sod, rammed earth and compressed stabilized earth blocks (CSEB). Students will project the possibilities and propose positive spatial effects through investigations of aberrant techniques and processes.

0101	Tonya Ohnstad	Seats (Total: 15)
	M 11:00am - 1:40pm	ARC 1127

ARCH419 Independent Studies in Architectural Technology

Credits: 1-4

Grading Method: Regular,
Pass-Fail, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

0101	Ming Hu	Seats (Total: 5)
	Contact instructor or department for details.	

ARCH426 History of Architecture II

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Restriction: Permission of ARCH-Architecture Program. Credit only granted for: ARCH226 or ARCH426. Additional information: Graduate architecture history course requires additional recitation section and additional coursework tied to survey lectures.

Post-1500 - History of Architecture survey course - History of Architecture structured to develop critical thinking and visually literacy with regard to the worldwide legacy of design thinking and building innovation in architecture. Structured to nurture critical thinking and visually literacy with regard to the worldwide legacy of architecture. The work in the course will involve the evaluation of sources and arguments in reading architectural history. Architecture will be framed relative to ways of thinking, religious beliefs, cultural heritage, and cultural values.

Offered fall only.

0101	Juan Burke	Seats (Total: 120)
	TuTh 9:30am - 10:45am	Location: TBA

ARCH427 Theories of Architecture

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ARCH426; or permission of ARCH-Architecture Program. Restriction: Must be in Architecture (B.S.) program.

Survey of architectural theories - theories of architectural design, representation and urban design from antiquity to the present day.

0101	Christian Calleri	Seats (Total: 15)
	TuTh 7:00pm - 8:15pm	ASY 3219

ARCH428C Selected Topics in Architectural History; City Beautiful Architecture & Urbanism in USA

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Selected Topics in Architectural History

0101	Cynthia Field	Seats (Total: 10)
	TuTh 2:00pm - 3:15pm	ARC 1125

ARCH428E Selected Topics in Architectural History; Global Renaissance

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Selected Topics in Architectural History

Restriction: permission of department. The course 'Global Renaissance' explores the architecture and urban cultures that flourished under the wide-reaching concept of the Renaissance, during the period ranging from 1450 to 1700. The Renaissance is a term that we usually associate to northern Italy, where it originated. However, the phenomenon of the Renaissance coincided with an age of global exploration, commerce, trade, and colonialism, all of which expanded the ideas of the Renaissance to every corner of Europe, the Mediterranean, the New World, and beyond. During the course we will work with UMD's MITH (Maryland Institute for Technology in the Humanities), in order to create a digital humanities platform (a web page) in which we will showcase the work you will produce throughout the course. The main characteristic of the digital humanities is to employ technological tools to present humanities subjects under new light. In this case, the work will take the form of 3-D architectural models, use of GIS tools, image editing, or other digital-technological tools in order to produce a public pedagogical resource on the subject of the Global Renaissance.

0101	Juan Burke	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	ARC 1123

ARCH428N Selected Topics in Architectural History; Medieval Architecture

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Selected Topics in Architectural History

Prerequisite: ARCH225 and ARCH226. Jointly offered with ARCH628N. Credit only granted for: ARCH428N or ARCH628N. Medieval Europe and the Mediterranean produced a unique building culture in which design was flexible and deeply grounded in the act of construction. In this class, we will trace the diversity of Byzantine, Islamic, Romanesque and Gothic architecture through select case studies. Students will learn to unravel buildings in terms of phases of construction, relate each phase to a different social or political context, and describe the structural technologies that medieval masons rightly flaunted.

0101	Joseph Williams	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	SQH 1101

ARCH428O Selected Topics in Architectural History; Construction Archaeology

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Selected Topics in Architectural History

Prerequisite: ARCH225 and ARCH226. Jointly offered with ARCH628F. Credit only granted for ARCH628F or ARCH428O. The archaeology of buildings was born as a specialized interest of 19th-century architects and restorers, but has now matured into a fascinating method of discovering how buildings were built. By simply looking closely at the physical fabric, one can parse historic construction techniques, reconstruct the sequence of building, and reveal the conflicts and drama of a layered history. Focusing on the Cathedral of Notre-Dame in Paris, the victim of a tragic fire earlier this year, we will apply a range of archaeological principals and techniques, such as stratigraphy, elevation drawings, plan overlays, photogrammetry, and the analysis of 3-D scans. Your analyses will inform a course-concluding roundtable discussion of whether and how to restore or conserve Notre-Dame.

0101	Joseph Williams	Seats (Total: 5)
	Tu 7:00pm - 9:40pm	ARC 1127

ARCH428T Selected Topics in Architectural History; American Building Typologies

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Selected Topics in Architectural History

Examines key public, institutional, commercial, and residential building types since the founding of the nation to 1980. Such an approach to American architecture facilitates in-depth studies of like-purposed buildings, focusing on function and design through time. Categories could include state capitals, jails and prisons, places of worship, libraries, art academies and cultural institutions, railroad stations, banks, stores and so on. Students gain additional perspective by examining the buildings' historical, cultural, and social contexts.

0101	Caroline Hickman	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ARC 1101

ARCH429 Independent Studies in Architectural History

(Perm req)

Credits: 1-4 Grading Method: Regular,
Pass-Fail, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

Prerequisite: permission of department.

0101	Michele Lamprakos	Seats (Total: 5)
	Contact instructor or department for details.	

ARCH430 Measuring Sustainability in Architecture

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: ARCH430 or ARCH418M. Formerly: ARCH418M.

Studies metrics of sustainability as included in rating standards, including LEED. All students will take the LEED GA test.

0101	Ralph Bennett	Seats (Total: 75)
	TuTh 5:00pm - 6:15pm	ARC 0204

ARCH443

Visual Communication For Architects

(Perm req)

Credits: 3

Grading Method: Regular

Corequisite: ARCH400. Restriction: Must be in Architecture (Master's) program; and must be in the 3.5 year M. ARCH program.

Investigation of the relationship between drawing from life and architectural drawing, the conventions of architectural drawing and the role of architectural drawing as a means to develop, communicate, and generate architectural ideas.

0101	Michael Abrams	Seats (Total: 40)
	M 10:00am - 12:40pm	ARC 1105

ARCH449

Independent Studies in Visual Studies in Architecture

(Perm req)

Credits: 1-4

Grading Method: Regular,
Pass-Fail, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

Prerequisite: permission of department.

0101	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	

ARCH459

Independent Studies in Urban Design

Credits: 1-4

Grading Method: Regular,
Pass-Fail, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

0101	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	

ARCH460

Site Analysis and Design

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of ARCH-Architecture Program.

Principles and methods of site analysis; the influence of natural and man-made site factors on site design and architectural form.

0101	Jana VanderGoot	Seats (Total: 60)
	F 9:30am - 12:00pm	Location: TBA

ARCH462

Methods & Materials of Building Construction

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in a major in ARCH-Architecture Program; or must be in Construction Project Management Minor. Credit only granted for: ARCH410 or ARCH462.

Building Construction methods and materials are examined through case studies to explore the means and techniques applied to the material execution of buildings and BIM. Focus on an understanding of the organization of the design and construction process and awareness of building and zoning codes, material systems and types.

0101	Ming Hu	Seats (Total: 105)
	TuTh 12:30pm - 1:45pm	ARC 0204

ARCH464

Architectural Structures I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in a major in ARCH-Architecture Program. Credit only granted for: ARCH411 or ARCH464.

This course covers the basic principles of architectural structures, including the influence of geometric, sectional, and material properties related to flexure and shear in beam and framed systems; vector mechanics with application to analysis of trusses, catenaries, and arches; diagrammatic analysis of beams for bending moment, shear, and deflection as well as the study of structural framing systems for vertical and lateral loads.

0101	Ming Hu	Seats (Total: 70)
	TuTh 9:30am - 10:45am	ARC 0204

ARCH466 Environmental Systems in Architecture

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in a major in ARCH-Architecture Program. Credit only granted for: ARCH413 or ARCH466.

Environmental systems in architecture presents the theory, quantification, and architectural design implications for heating ventilating and air conditioning, water and waste, fire protection, electricity, illumination, acoustics, and vertical transportation.

0101	Carl Bovill	Seats (Total: 90)
	TuTh 11:00am - 12:15pm	ARC 0204

ARCH467 Integrated Project Delivery

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in a major in ARCH-Architecture Program; or must be in Construction Project Management Minor.

Integrated Project Delivery is examined from design to implementation through an exploration of building construction, architectural design and construction management perspectives.

0101	Andrew Kelmers	Seats (Total: 10)
	Th 7:00pm - 9:40pm	ARC 1125

ARCH470 Computer Applications in Architecture

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ARCH400; or permission of ARCH-Architecture Program. Restriction: Must be in Architecture (B.S.) program.

Introduction to computer utilization, with emphasis on architectural applications.

0101	Andrew Lindberg	Seats (Total: 18)
	Tu 7:00pm - 9:30pm	ARC 1115
	Th 7:00pm - 8:15pm	ARC 1115 Lab

ARCH472 Building Information Modeling Communication and Collaboration

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in a major in ARCH-Architecture Program; or must be in the Construction Project Management Minor. Credit only granted for: ARCH678I or ARCH472. Formerly: ARCH678I.

Building Information Modeling is explored as it pertains to collaboration and communication in the design and construction of buildings and building systems. Practical and empirical learning using BIM software and case studies of real world projects and construction scenarios.

0101	Douglas Crawford	Seats (Total: 20)
	WF 9:30am - 10:45am	ARC 1115
0102	Douglas Crawford	Seats (Total: 20)
	WF 11:00am - 12:15pm	ARC 1115

ARCH478T Selected Topics in Architecture; Ecological Design Thinking

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Selected Topics in Architecture

The etymology and definition of ecology contain aspects of house, of relationships, of the living environment and of systems. We will engage with all of these concepts in this course. Design thinking is a form of systems thinking, in which many variables and scales, requirements and ideas interact to form a coherent whole. We will ask WHY a lot. We will ask WHY a lot. We will discover ways to confront difficult truths, negotiate contradictions, and still be an effective advocate and change agent.

0101	Julie Gabrielli	Seats (Total: 15)
	W 9:00am - 11:40am	ARC 1101

ARCH479 Independent Studies in Architecture

(Perm req)

Credits: 1-4 Grading Method: Regular,
Pass-Fail, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

Prerequisite: permission of department.

0101	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	

0123	Andrew Linn	Seats (Total: 1)
Contact instructor or department for details.		

ARCH489 Independent Studies in Architectural Preservation

(Perm req)

Credits: 1-4 Grading Method: Regular,
Pass-Fail, Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

Prerequisite: permission of department.

0101	Instructor: TBA	Seats (Total: 5)
Contact instructor or department for details.		

ARCH600 Integrated Design Studio V

(Perm req)

Credits: 6 Grading Method: Regular,
Audit

Corequisite: ARCH611. Restriction: Permission of ARCH-Architecture Program.

Integrated and comprehensive building and site design. Course content bridges the gap between design and technology, between practice and education, in a studio setting. Explorations include the integration of conceptual and technical aspects of architectural form and assembly, highlighting the ways in which multiple layers of a building design are developed, coordinated and resolved.

0101	Julie Gabrielli, Amy Gardner	Seats (Total: 12)
	MWF 2:00pm - 6:00pm	Location: TBA

ARCH611 Advanced Architecture Technology Seminar

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Corequisite: ARCH600. Restriction: Permission of ARCH-Architecture Program.

Technology in design of buildings. Application of technological issues in building design; integration of technology in architecture; technology as a form determinant in architecture; other conceptual and philosophical issues related to the application of technology in the design, construction, and use of buildings.

Offered fall only.

0101	Carl Bovill, Gregory Wiedemann	Seats (Total: 25)
	TuTh 5:00pm - 6:15pm	ARC 1103

ARCH628

Selected Topics in Architectural History

Credits: 1-4 Grading Method: Regular,
Audit

Graduate Selected Topics in Architectural History

0101	Instructor: TBA	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	Location: TBA

ARCH628C

Selected Topics in Architectural History; City Beautiful Architecture & Urbanism in USA

Credits: 3 Grading Method: Regular,
Audit

Graduate Selected Topics in Architectural History

0101	Cynthia Field	Seats (Total: 9)
	TuTh 2:00pm - 3:15pm	ARC 1125

ARCH628E

Selected Topics in Architectural History; Global Renaissance

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Graduate Selected Topics in Architectural History

The course 'Global Renaissance' explores the architecture and urban cultures that flourished under the wide-reaching concept of the Renaissance, during the period ranging from 1450 to 1700. The Renaissance is a term that we usually associate to northern Italy, where it originated. However, the phenomenon of the Renaissance coincided with an age of global exploration, commerce, trade, and colonialism, all of which expanded the ideas of the Renaissance to every corner of Europe, the Mediterranean, the New World, and beyond. During the course we will work with UMD's MITH (Maryland Institute for Technology in the Humanities), in order to create a digital humanities platform (a web page) in which we will showcase the work you will produce throughout the course. The main characteristic of the digital humanities is to employ technological tools to present humanities subjects under new light. In this case, the work will take the form of 3-D architectural models, use of GIS tools, image editing, or other digital-technological tools in order to produce a public pedagogical resource on the subject of the Global Renaissance.

0101	Juan Burke	Seats (Total: 4)
	TuTh 2:00pm - 3:15pm	ARC 1123

ARCH628F Selected Topics in Architectural History; Construction Archaeology

(Perm req)

Credits: 3

Grading Method: Regular,
Audit*Graduate Selected Topics in Architectural History*

Jointly offered with ARCH428O. Credit only granted for ARCH628F or ARCH428O. The archaeology of buildings was born as a specialized interest of 19th-century architects and restorers, but has now matured into a fascinating method of discovering how buildings were built. By simply looking closely at the physical fabric, one can parse historic construction techniques, reconstruct the sequence of building, and reveal the conflicts and drama of a layered history. Focusing on the Cathedral of Notre-Dame in Paris, the victim of a tragic fire earlier this year, we will apply a range of archaeological principals and techniques, such as stratigraphy, elevation drawings, plan overlays, photogrammetry, and the analysis of 3-D scans. Your analyses will inform a course-concluding roundtable discussion of whether and how to restore or conserve Notre-Dame.

0101	Joseph Williams	Seats (Total: 15)
	Tu 7:00pm - 9:40pm	ARC 1127

ARCH628N Selected Topics in Architectural History; Medieval Architecture

Credits: 3

Grading Method: Regular,
Audit*Graduate Selected Topics in Architectural History*

Jointly offered with ARCH428N. Credit only granted for: ARCH428N or ARCH628N. Medieval Europe and the Mediterranean produced a unique building culture in which design was flexible and deeply grounded in the act of construction. In this class, we will trace the diversity of Byzantine, Islamic, Romanesque and Gothic architecture through select case studies. Students will learn to unravel buildings in terms of phases of construction, relate each phase to a different social or political context, and describe the structural technologies that medieval masons rightly flaunted.

0101	Joseph Williams	Seats (Total: 15)
	TuTh 3:30pm - 4:45pm	SQH 1101

ARCH628T Selected Topics in Architectural History; American Building Typologies

(Perm req)

Credits: 3

Grading Method: Regular,
Audit*Graduate Selected Topics in Architectural History*

Examines key public, institutional, commercial, and residential building types since the founding of the nation to 1980. Such an approach to American architecture facilitates in-depth studies of like-purposed buildings, focusing on function and design through time. Categories could include state capitals, jails and prisons, places of worship, libraries, art academies and cultural institutions, railroad stations, banks, stores and so on. Students gain additional perspective by examining the buildings' historical, cultural, and social contexts.

0101	Caroline Hickman	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	ARC 1101

ARCH629

Graduate Independent Studies in Architectural History

(Perm req)

Credits: 1-4 Grading Method: Regular,
Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

0701	Instructor: TBA	Seats (Total: 10)
	Contact instructor or department for details.	
0801	Instructor: TBA	Seats (Total: 10)
	Contact instructor or department for details.	
0901	Instructor: TBA	Seats (Total: 2)
	Contact instructor or department for details.	

ARCH678B

Advanced Selected Topics in Architecture; Health Scores: Community Design for Mattaponi, Maryland

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Graduate Selected Topics in Architecture.

0101	Jana VanderGoot	Seats (Total: 5)
	Tu 6:00pm - 8:40pm	Location: TBA

ARCH678T

Advanced Selected Topics in Architecture; Ecological Design Thinking

Credits: 3 Grading Method: Regular,
Audit

Graduate Selected Topics in Architecture.

Restriction: Open to all disciplines; subject to instructor approval. The etymology and definition of "ecology" contain aspects of house, of relationships and reciprocity, of the living environment and of systems. We will engage with all of these concepts in this course. Design thinking is a form of systems thinking, in which many variables and scales, requirements and ideas interact to form a coherent, dynamic whole. We will confront difficult truths, negotiate contradictions, and find ways to be an effective advocate and change agent.

0101	Julie Gabrielli	Seats (Total: 10)
	W 9:00am - 11:40am	ARC 1103

ARCH678Z Advanced Selected Topics in Architecture; Sensing Architecture: Body and Place

Credits: 3 Grading Method: Regular,
Audit

Graduate Selected Topics in Architecture.

This course is a graduate level seminar that investigates issues of perception, the senses, and a phenomenological approach to architecture and the built environment. Themes from the readings are centered on a sensual approach to engaging the environment. The structure of the course consists of seminar discussion, presentations, research, and a series of creative projects that include visual and tactile compositions in a variety of media that actively engage the ideas and texts of the seminar.

0101	Peter Noonan	Seats (Total: 15)
	Th 7:00pm - 9:40pm	ARC 1127

ARCH679 Advanced Independent Studies in Architecture; Independent Study in Architecture

Credits: 1-4 Grading Method: Regular,
Audit

Proposed work must have a faculty sponsor and receive approval of the Architecture Program Curriculum Committee.

Contact department for information to register for this course.

ARCH700 Urban Design Studio VII

(Perm req) Credits: 6 Grading Method: Regular,
Audit

Restriction: Permission of ARCH-Architecture Program.

Studio problems and theories concentrating on urbanism and urban design techniques. Issues and sites range from high density urban in-fill to suburban and greenfield development in American and other contexts. Studio theories explore such topics as Contextualism, Neo-Traditional design, Transit-Oriented Development, density, sustainable development building typology, and street design.

0101	Matthew Bell	Seats (Total: 19)
	TuTh 1:00pm - 6:00pm	ARC 1127
	F 4:00pm - 6:00pm	Location: TBA

ARCH770 Professional Practice of Architecture

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of ARCH-Architecture Program.

Project management, organizational, legal, economic and ethical aspects of architecture.

0101	Andrew Pressman	Seats (Total: 30)
	M 11:00am - 1:50pm	ARC 1101

ARCH797 Thesis Proseminar

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ARCH601.

Directed research and preparation of thesis program.

0101	James Tilghman	Seats (Total: 20)
	TuTh 9:00am - 10:15am	ARC 1103

ARCH798 Thesis in Architecture

(Perm req)

Credits: 3 Grading Method: Regular

Complements the research of ARCH 799, with presentation of the design research to student's thesis committee.

Contact department for information to register for this course.

ARCH799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Development of master's thesis.

Restricted to ARCH majors only.

Contact department for information to register for this course.

AREC200

The Chesapeake Bay Ecosystem: Intersection of Science, Economics, and Policy

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: LS

General Education: DSNS,
DSSP, SCIS

The Chesapeake Bay is one of the most studied and monitored ecosystems in the world. To develop effective policies to restore this system to a healthier status requires integrating what we know about the biological and physical properties of the system with our understanding of the human dimension. Issues such as achieving nutrient reduction goals, restoring healthy blue crab and oyster fisheries in the bay will be used to demonstrate how economics interacts with science to guide policies that can be effective in achieving Bay restoration goals.

0101	Sara Lombardi, Jorge Holzer Bilbao	Seats (Total: 35)	
	MW 10:00am - 10:50am	ESJ 2204	
	F 11:00am - 11:50am	PLS 1113	Discussion
0102	Jorge Holzer Bilbao, Sara Lombardi	Seats (Total: 35)	
	MW 10:00am - 10:50am	ESJ 2204	
	F 11:00am - 11:50am	EGR 3106	Discussion
0103	Sara Lombardi, Jorge Holzer Bilbao	Seats (Total: 35)	
	MW 10:00am - 10:50am	ESJ 2204	
	F 10:00am - 10:50am	BPS 1236	Discussion
0104	Sara Lombardi, Jorge Holzer Bilbao	Seats (Total: 35)	
	MW 10:00am - 10:50am	ESJ 2204	
	F 10:00am - 10:50am	CHM 0122	Discussion

AREC241

Environment, Economics and Policy

Credits: 4

Grading Method: Regular,
Pass-Fail, AuditGeneral Education: DSHS,
SCIS

Credit only granted for: AREC240 or AREC241.

Studies the relationship between the economy, environment and policy. Causes of modern environmental problems and policies to address them. Importance of production, consumption, externalities, property rights and public goods in environmental issues. Technological and incentive-based solutions to environmental problems.

0101	Lars Olson	Seats (Total: 36)	
	TuTh 11:00am - 12:15pm	TYD 2106	
	W 10:00am - 10:50am	PLS 1111	Discussion

0102	Lars Olson	Seats (Total: 36)	
	TuTh 11:00am - 12:15pm	TYD 2106	
	W 11:00am - 11:50am	PLS 1117	Discussion

AREC250 Elements of Agricultural and Resource Economics

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS

Credit only granted for: ECON200, AREC240 or AREC250.

An introduction to economic principles of production, marketing, agricultural prices and incomes, farm labor, credit, agricultural policies, and government programs.

0101	Jeffrey Hunt	Seats (Total: 80)	
	TuTh 9:30am - 10:45am	BRB 1101	

AREC306 Farm Management and Sustainable Food Production

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

The organization and operation of farm businesses are explored through principles of management, financial analysis, production economics, marketing, and business planning. These farm management principles are presented in the context of a sustainable food production system.

0101	Dale Johnson	Seats (Total: 40)	
	MW 3:30pm - 4:45pm	LEF 2166	

AREC326 Intermediate Applied Microeconomics

Credits: 3 Grading Method: Regular

Prerequisite: ECON200, AREC250, or AREC240; and ECON201. And MATH120, MATH130, MATH136, or MATH140; or must have completed MATH220. Credit only granted for: ECON306, ECON326, AREC489M, or AREC326. Formerly: AREC489M.

Deepens and broadens your ability to apply rigorous economic analysis skills to a broad range of problems.

0101	Neslihan Uler	Seats (Total: 45)	
	TuTh 9:30am - 10:45am	JMZ 2206	

AREC365 World Hunger, Population, and Food Supplies

Credits: 3 Grading Method: Regular, , D General Education: DVUP
Pass-Fail, Audit

An introduction to the problem of world hunger and possible solutions to it. World demand, supply, and distribution of food. Alternatives for leveling off world food demand, increasing the supply of food, and improving its distribution. Environmental limitations to increasing world food production.

0101	Kartik Misra	Seats (Total: 300)
	MWF 1:00pm - 1:50pm	ESJ 0202

AREC380 Data Science for Environmental and Resource Economics

Credits: 3 Grading Method: Regular

Prerequisite: AREC240, AREC241, AREC250, or ECON200.

An introduction to principles of data science using modern, open source software tools with applications to important problems in environmental, energy and resource economics. Topics include data wrangling, exploratory data analysis and visualization, modeling, forecasting, practices for reproducible research, and communication of results.

0101	James Archsmith	Seats (Total: 30)
	MWF 10:00am - 10:50am	PLS 1129

AREC386 Experiential Learning

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Prerequisite: Permission of AGNR-Agricultural & Resource Economics department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

AREC388 Honors Thesis Research

(Perm req)

Credits: 3-6 Grading Method: Regular

Undergraduate honors thesis research conducted under the direction of an AGNR faculty member in partial fulfillment of the requirements of the College of AGNR Honors Program. The thesis will be defended to a faculty committee.

Contact department for information to register for this course.

AREC399 Special Problems

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Concentrated reading and study in some phase of a problem in agricultural and/or natural resource economics.

Contact department for information to register for this course.

AREC422 Econometric Applications in Agricultural and Natural Resource Economics

Credits: 3 Grading Method: Regular

Prerequisite: AREC326; or ECON326. Credit only granted for: ECON422, AREC422, or AREC489F. Formerly: AREC489F.

The main goal of this course is to equip students with valuable skills in econometrics and data analysis. Specifically, the main goal of the course is to teach you the basics of the theory and practice of econometrics, and to give you experience in estimating econometric models with actual data.

0101	Louis Preonas	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	BPS 1238

AREC426 Economic Methods and Food Consumption Policy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: AREC326; or ECON326. Credit only granted for: AREC489O or AREC426. Formerly: AREC489O.

An overview of major econometric tools used by policy makers, economists and social scientists to analyze the effects of food consumption policy. Major food assistance programs in the United States such as SNAP, the School Lunch Program and the School Breakfast Program will be discussed.

0101	Mary Zaki	Seats (Total: 40)
	TuTh 9:30am - 10:45am	ASY 3203

AREC453 Natural Resources and Public Policy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: AREC326, ECON306, or ECON326; and (BMGT230 or ECON230). Restriction: Must be in one of the following programs (Agricultural and Resource Economics; Agricultural and Resource Economics: Agribusiness; Agricultural and Resource Economics: Environmental and Resource Economics; Economics Bachelor of Arts; Environmental Science & Policy-Env Economics). Cross-listed with ECON453. Credit only granted for: AREC453 or ECON453.

Rational use and reuse of natural resources. Theory, methodology, and policies concerned with the allocation of natural resources among alternative uses. Optimum state of conservation, market failure, safe minimum standard, and cost-benefit analysis.

0101	Erik Lichtenberg	Seats (Total: 80)
	TuTh 2:00pm - 3:15pm	SYM 0200

AREC455 Economics of Land Use

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (AREC326, ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, ECON321, BMGT230). Cross-listed with: ECON485. Credit only granted for: AREC455 or ECON485.

Fundamentals of location theory. Microeconomics of land use decisions, including determination of rent and hedonic pricing models. Impacts of government decisions on land use, including regulation (e.g., zoning), incentives (transferable development rights), provision of public services, and infrastructure investments. Impacts of land use on environmental quality, including issues relating to sprawl, agricultural land preservation, and other topics of special interest.

0101	David Newburn	Seats (Total: 80)
	TuTh 3:30pm - 4:45pm	SYM 0200

AREC620 Optimization in Agricultural and Resource Economics

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have completed Multivariate calculus and matrix or linear algebra.

Mathematical theory of static and dynamic optimization as applied to the economics of agriculture, natural resources and the environment. Topics include necessary and sufficient conditions for constrained optimization, convexity and concavity, duality and the envelope theorem, comparative statics, fixed point theorems, optimal control theory and dynamic programming.

0101	Lars Olson	Seats (Total: 25)
	W 5:30pm - 8:00pm	SYM 0209
	M 2:00pm - 3:15pm	HBK 1108 Discussion

AREC623 Applied Econometrics I

Credits: 4 Grading Method: Regular,
Audit

Prerequisite: Introductory statistics or econometrics, linear algebra, and differential/calculus; or permission of instructor. Additional information: Intended for first-year Ph.D. students from AREC, BUFN, ECON, EDMS, EDUC, PLCY and URSP departments with a background in introductory statistics or econometrics.

A modern introduction to empirical strategies in applied microeconomic research in public policy, development economics, labor economics, education, marketing and corporate finance. Emphasis on causal reasoning and design-driven identification in the social sciences. Concepts and applications will focus on addressing economically meaningful causal questions. Basic theoretical and mathematical aspects of probability and statistics will be developed to assess the significance of the relationship among economic variables. Topics include: the approximation of the conditional expectation function through a linear predictor (Ordinary Least Squares), the effects of omitted variables and the usefulness of variables that resemble the outcome of a randomized experiment (Instrumental Variables), as well as extensions to high-dimensional big-data counterparts. Fundamental concepts in sampling theory, statistical inference (with small and large samples) and hypothesis testing will be studied and applied to real data using Stata, a general-purpose statistical software.

0101	Erich Battistin	Seats (Total: 27)	
	TuTh 11:00am - 1:30pm	SYM 0209	
	F 11:00am - 1:00pm	SYM 0115	Discussion

AREC699

Special Problems in Agricultural and Resource Economics

(Perm req)

Credits: 1-2 Grading Method: Regular,
Audit

Intensive study and analysis of specific problems in the field of agricultural and resource economics, providing in-depth information in areas of special interest to the student.

Contact department for information to register for this course.

AREC799

Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

AREC829

Policy Design and Causal Inference for Social Science

Credits: 3 Grading Method: Regular,
Audit

A course in applied econometrics that examines empirical strategies in applied microeconomic research used to estimate the effects of a policy or program on the outcomes of interest in fields like public policy, development economics, labor economics, education, marketing and corporate finance, as well as in industry and international organizations. Methods in applied econometrics with a focus on the thought experiment, the hypothetical experiment that should be used to answer the causal question of interest. A taxonomy of departures from the experimental ideal is presented, as well as the assumptions required to mimic the conditions of the unfeasible experiment from observational data. Topics include regression and matching, instrumental variables and natural experiments, differences-in-differences, change-in-changes, synthetic control methods and regression discontinuity designs. Causal parameters defined from conditional moments, and quantiles and effects on conditional distributions (for inequality and poverty assessment) are considered. Stata, a general-purpose statistical software widely used by applied economists, is used to develop concepts and applications.

0101	Erich Battistin	Seats (Total: 25)
	Tu 3:30pm - 6:00pm	SYM 0209

AREC892 Dissertation Prospectus Development

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Completion of two years of the AREC Ph.D. program. Credit only granted for: AREC 869P or AREC 892. Formerly: AREC869P.

Presentations of proposed dissertation research including literature review, model development, data identification, and written prospectus development. Required of all third-year Ph.D. students.

0101	Erik Lichtenberg	Seats (Total: 35)
	TuTh 9:30am - 10:45am	SYM 2200B

AREC898 Pre-Candidacy Research

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

AREC899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

ARHU Arts and Humanities

Fall 2019

ARHU158L Explorations in Arts and Humanities; Let's Talk Gender: The Construction of Gendered Identities Across Media and Culture

Credits: 3 Grading Method: Regular

General Education: DSSP

A first-year innovation and research experience. It introduces multiple disciplinary perspectives within a given theme to understand human beings, cultures and societies. Students will learn about key questions, concepts, methods, and practices within ARHU and will engage in original humanistic research while working with campus and college tools and resources.

Restricted to first semester freshmen in the College of Arts and Humanities. Students will explore the connection between gender, media, and culture. They will pose questions about how various communication and cultural practices shape the manifestations and representations (or misrepresentations) of complex and varied gendered identities, whether feminine, masculine, or queer. They will also fully engage in a wide-ranging discussion of the ties between gender, race, ethnicity, culture, and mediated communication from a multidisciplinary perspective, stretching across the fields of communication, gender studies, sociology, anthropology, and history.

0101	Sahar Khamis	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	KEY 0100

ARHU158Q Explorations in Arts and Humanities; The Power of Youth

Credits: 3

Grading Method: Regular

General Education: DSSP

A first-year innovation and research experience. It introduces multiple disciplinary perspectives within a given theme to understand human beings, cultures and societies. Students will learn about key questions, concepts, methods, and practices within ARHU and will engage in original humanistic research while working with campus and college tools and resources.

Restricted to first year students in the College of Arts and Humanities. Twenty-something influencers like Kylie Jenner and PewDiePie use social media to reach their millions of followers and to help shape what they think about, talk about, and purchase. Parkland, Florida students Emma Gonzalez and David Hogg show how young people can affect social change by advocating for stricter gun control laws on national media outlets. Starting with these examples and drawing from literature, politics, and gender and sexuality studies, we will analyze youth and its power in our culture.

0101	Robert Crane	Seats (Total: 25)
	MW 3:30pm - 4:45pm	KEY 0126

ARHU158R Explorations in Arts and Humanities; Why do American Places Matter?

Credits: 3

Grading Method: Regular

General Education: DSSP

A first-year innovation and research experience. It introduces multiple disciplinary perspectives within a given theme to understand human beings, cultures and societies. Students will learn about key questions, concepts, methods, and practices within ARHU and will engage in original humanistic research while working with campus and college tools and resources.

Restricted to first semester freshmen in the College of Arts and Humanities. Where do you live, work, study, and spend free time? Who gets to "use" specific places and why? What can the histories of places reveal to us about life in the modern world and how do they challenge powerful assumptions about the American experience? Drawing from history, literature, and art history, we will examine our relationships to American places-- to its "built environments"-- ranging from shopping malls, factories, and fast-food restaurants to impoverished neighborhoods, gentrifying downtowns, college campuses, suburban skate parks, and perhaps, through a research project, your home town.

0101	David Freund	Seats (Total: 25)
	MW 10:00am - 11:15am	TWS 1313

ARHU158T

Explorations in Arts and Humanities; Using Science Fiction to Interrogate Diversity, Identity, and Power

Credits: 3

Grading Method: Regular

General Education: DSSP

A first-year innovation and research experience. It introduces multiple disciplinary perspectives within a given theme to understand human beings, cultures and societies. Students will learn about key questions, concepts, methods, and practices within ARHU and will engage in original humanistic research while working with campus and college tools and resources.

Restricted to first semester freshmen in the College of Arts and Humanities. How do we engage with, embrace, or push back against various science fiction visions of the future? And what does that tell us about ourselves and our collective futures? Students will examine how science fiction texts-- including novels, short stories, movies, and television-- and science fiction scholarship-- intersect with writers and readers (including women, LGBTQ people, people of color, and indigenous populations) and with current political movements, trends, and "identity politics."

0101	Rebecca Holden	Seats (Total: 25)
	TuTh 9:30am - 10:45am	TWS 1313

ARHU230

Introduction to Health, Medicine, and Humanities

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHU

Restriction: Permission of ARHU-School of Languages, Literatures, and Cultures department. Cross-listed with: ENGL289C. Credit only granted for: ARHU230 or ENGL289C.

An overview of the historical, cultural, ethical, and spiritual dimensions of medicine, human health, disease, and death from the points of view of various humanistic disciplines.

Credit only granted for: ENGL289C or ARHU230.

0101	Marybeth Shea	Seats (Total: 20)
	MWF 12:00pm - 12:50pm	TWS 0224

ARHU240 Cultural Institutions of the United States

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

An introduction to cultural institutions in the United States, while providing student exposure to the professional environment artist find themselves in. In order for artist and arts administrators to succeed after their educational experience it is critical to understand the history of their respective field, and which events and questions have shaped, and are shaping, their industry. This course is very much an interdisciplinary initiative. Over the past century the arts have become ever-more integrated with one another resulting in a requirement of not only understanding one discipline, but how other disciplines affect a particular practice.

Cross-listed with TDPS258C. Credit granted for ARHU240 or TDPS258C.

0101	Fraser Stevens	Seats (Total: 25)
	MWF 1:00pm - 1:50pm	ARC 1105

ARHU269M Special Topics in Study Abroad II; Sicily Against the Mafia

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARHU269P Special Topics in Study Abroad II; Mystery Paintings

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARHU269V Special Topics in Study Abroad II; Vienna and Budapest Field Study

Credits: 1-6

Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARHU275 Writing to be Seen: Scriptwriting for Theatre, Film, and Television

Credits: 3

Grading Method: Regular,
Pass-FailGeneral Education: DSHU,
DSSP

Cross-listed with ENGL275. Credit only granted for: ENGL278D, ENGL275, ARHU319B or ARHU275. Formerly: ENGL278D; ARHU319B.

Introduction to theory and practice of scriptwriting with opportunity to read, view, evaluate, write, and revise texts meant to be performed for spectators. Practice writing for the stage, film and television, with emphasis on critical reading of textual and visual literary models. Theory and scholarship teaching opportunities and advantages of each format. Application of scholarship to analysis and critique of plays and texts successful across two different formats. Examination of selected scripts, performances, and film and television clips as models for students' own creative work. Frequent writing exercises and use of workshop format.

0101	Joseph Angelella TuTh 3:30pm - 4:45pm	Seats (Total: 15) TWS 1105
0102	Joseph Angelella TuTh 3:30pm - 4:45pm <i>This section is restricted to students in the Jimenez-Porter Writers' House.</i>	Seats (Total: 5) TWS 1105
0201	Stan Waring MWF 10:00am - 10:50am	Seats (Total: 20) KEY 0123

ARHU286

(Perm req)

Experiential Learning

Credits: 3-6

Grading Method: Regular,
Pass-Fail

Prerequisite: Permission of ARHU-College of Arts & Humanities. Restriction: Minimum cumulative GPA of 2.5; and must be in a major or minor in ARHU - College of Arts and Humanities; and must have earned a minimum of 12 credits; and must not have earned more than 60 credits.

Designed for students who have completed fewer than 60 credits, students who are in their first semester at the University of Maryland, and/or students who wish to complete legislative internships, research-based internships, some start-up internships and some remote internships. All students must be enrolled in an ARHU major or minor and the internship must be in one of the academic fields covered within the College of Arts and Humanities. In addition to completing their required hours on site, students with fewer than 60 credits and students who are in their first semester at the University of Maryland will be required to attend three bi-weekly seminars at the beginning of the semester to help develop their para-professional goals and understandings.

0101	Paula Nadler Contact instructor or department for details.	Seats (Total: 5)
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ARHU298L

Critical Approaches to Traditional and Non-Traditional Literary Forms across Different Cultures

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL General Education: DSHU

Examines the different types of literature (Novel, Short Story, Flash Fiction, Comics, etc.) produced by groups or individuals under diverse circumstances (cultural, historical, political, geographical, economic, philosophical, etc.). The required texts will provide the students with an opportunity to reevaluate some commonly underestimated literary forms, such as flash fiction, comics or spoken word poetry and to understand the function of these manifestations in relationship to more traditional (canonical) expressions such as the novel.

FC01	Thibault Raoult	Seats (Total: 24)
	TuTh 3:00pm - 4:15pm	EDU 3315
<i>Restricted to students in Freshman Connection.</i>		

ARHU309 Writers' House Colloquium: Creative Writing in Community

(Perm req)

Credits: 1 Grading Method: Regular

Colloquium designed to improve students' skills in literary and communication arts through lectures, workshop and discussions on the history and craft of writing across cultures. Topics include poetry and fiction in translation, and exploration of modes of critique, elements of craft of fiction and poetry, writing for different media, genre writing, writing for performance, screen or scriptwriting and creative non-fiction.

For Writers House students only.

0101	Johnna Schmidt	Seats (Total: 15)
	W 3:30pm - 5:00pm	QAN 1132
0201	Sabrina Islam	Seats (Total: 15)
	W 7:00pm - 8:30pm	QAN 1132
0301	Sabrina Islam	Seats (Total: 15)
	W 5:15pm - 6:45pm	QAN 1132

ARHU319A Writers' House Second Year Colloquium: Form and Theory of Creative Writing; Prose

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSHU, DSSP

Required course for Writers' House students pursuing the notation program. Offered in either poetry or imaginative prose writing. Students work at the intermediate level, refining creative writing skills through cross-cultural reading and writing exercises. As part of the course, students attend a series of lectures and readings given by professional writers.

For Writers' House students only. For further details please contact Johnna Schmidt
jmschmid@umd.edu. Course will meet in Queen Anne's Library.

0101	Vivianne Salgado	Seats (Total: 15)
	M 3:30pm - 6:00pm	QAN 1132
	Contact instructor or department for details.	

ARHU319B Writers' House Second Year Colloquium: Form and Theory of Creative Writing; Poetry

(Perm req)

Credits: 3

Grading Method: Regular

General Education: DSHU,
DSSP

Required course for Writers' House students pursuing the notation program. Offered in either poetry or imaginative prose writing. Students work at the intermediate level, refining creative writing skills through cross-cultural reading and writing exercises. As part of the course, students attend a series of lectures and readings given by professional writers.

For Writers' House students only. For further details please contact Johnna Schmidt
jmschmid@umd.edu. Course will meet in Queen Anne's Library.

0101	Laura Lauth	Seats (Total: 15)
	Th 5:30pm - 8:00pm	QAN 1132
	Contact instructor or department for details.	

ARHU319C Writers' House Second Year Colloquium: Form and Theory of Creative Writing; Spoken Word

(Perm req)

Credits: 3

Grading Method: Regular

General Education: DSHU,
DSSP

Required course for Writers' House students pursuing the notation program. Offered in either poetry or imaginative prose writing. Students work at the intermediate level, refining creative writing skills through cross-cultural reading and writing exercises. As part of the course, students attend a series of lectures and readings given by professional writers.

For further details please contact Johnna Schmidt jmschmid@umd.edu. Course will meet in the Stamp Student Union, Room 1121.

0101	Naliyah Kaya	Seats (Total: 15)
	W 3:30pm - 6:00pm	SSU 1121
	Contact instructor or department for details.	

ARHU338 Undergraduate Teaching Assistantship in a Living Learning Program

(Perm req)

Credits: 3

Grading Method: Regular

Offers exceptional students the opportunity to work closely with a faculty member and gain valuable experience. ARHU Living learning program UTAs also serve as peer mentors and program leaders. They assist with course planning, research, and student advising (as appropriate). We are also allowing for variable credit (1-3 cr hrs).

0101	Johnna Schmidt	Seats (Total: 10)
	Contact instructor or department for details.	
0102	Jason Farman	Seats (Total: 2)
	Contact instructor or department for details.	
0103	Jessica Lu	Seats (Total: 2)
	Contact instructor or department for details.	

ARHU375

The TV Writers Room Screenwriting for Television and Video

(Perm req)

Credits: 3

Grading Method: Regular

General Education: DSSP

Prerequisite: ARHU275, ARHU318, or FILM370; and permission of instructor. Additional information: Priority in enrollment will be given to students participating in the Jimenez-Porter Writers' House and FILM studies programs.

Students engage with the theory and practice of screenwriting for television and video. Students read and watch teleplays designed to teach advantages of the television format. Students apply what they learn to prepare frequent writing exercises, share and provide feedback for peers scripts in a workshop format, and work together as a Writers Room to prepare an original pilot episode.

0101	Paul Cote	Seats (Total: 15)
	M 12:30pm - 3:00pm	QAN 1132

ARHU386

Experiential Learning

(Perm req)

Credits: 3-6

Grading Method: Regular,
Pass-Fail

General Education: DSSP

Prerequisite: Permission of ARHU-College of Arts & Humanities. Restriction: Junior standing or higher.

0101	Paula Nadler	Seats (Total: 30)
	Contact instructor or department for details.	
0102	Susan Miller	Seats (Total: 3)
	Contact instructor or department for details.	
	<i>This section is restricted to students enrolled in the Arts Leadership Minor.</i>	

ARHU458**Graduate School Preparation**

Credits: 1 Grading Method: Regular,
Pass-Fail

Designed for Juniors and Seniors who are interested in applying to graduate school. Topics include skills needed for the graduate school search and application process, evaluation and reflection of application materials, preparation for GRE exam, and exploration into career options after graduate school. Focus on the Humanities fields.

Restriction: Must have earned a minimum of 45 credits. Designed for Juniors and Seniors who are interested in applying to graduate school. Topics include skills needed for the graduate school search and application process, evaluation and reflection of application materials, preparation for GRE exam, and exploration into career options after graduate school. Focus on the Humanities fields.

0101	Amanda Bachert	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

ARHU468A**Peer Mentoring Program; Arts and Humanities' Ambassador Program**

(Perm req)

Credits: 1 Grading Method: Regular

A workshop for sophomore, junior or senior students who wish to serve as peer mentors helping first-year students to cope with the numerous issues which often arise in the transition to the university.

Restricted to current ARHU students who will serve as ambassadors for the College of Arts and Humanities.

0101	J Darius Greene	Seats (Total: 20)
	Th 4:00pm - 5:30pm	KEY 0124

ARHU486**Internship Practicum in Arts and Humanities**

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Prerequisite: Have completed previous internship at U of MD. Restriction: Must be in a major in ARHU-College of Arts & Humanities; and permission of ARHU-College of Arts & Humanities; and minimum cumulative GPA of 2.5; and must have earned a minimum of 60 credits; and completed 12 credits at U of MD.

An internship intended for students who have already completed an internship for credit. ARHU486 must be a different experience from the internship students have already taken for credit. Generally students intern with a different company, but they may continue working for the same company if the job is significantly different. See ARHU internship coordinator for details.

0101	Paula Nadler	Seats (Total: 25)
Contact instructor or department for details.		

ARHU489

Advanced Internship Practicum in ARHU

(Perm req)

Credits: 3-6

Grading Method: Regular,
Pass-Fail

Designed for students who have already completed at least 2 upper level internship courses for academic credit. It is an advanced practicum to assist students in continuing to develop and hone their professional writing, presentation and analytical skills.

Prerequisite: Permission of the College of Arts and Humanities.

0101	Paula Nadler	Seats (Total: 2)
Contact instructor or department for details.		

ARMY

Army

Fall 2019

ARMY106

Basic Military Science I

Credits: 3

Grading Method: Regular

Restriction: Students must meet Officer candidate criteria to participate in field training.

Introduction to the personal challenges and competencies that are critical for effective leadership and communication. Develops knowledge and competency in physical fitness through rigorous training and experiential leadership education through leadership laboratories.

0101	Marisa Pace	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	VMH 1203
0102	Marisa Pace, John Andrews	Seats (Total: 40)
	MWF 9:00am - 9:50am	HBK 0103
FC01	Marisa Pace	Seats (Total: 40)
	MW 6:00pm - 7:15pm	PLS 1119
<i>Restricted to students in Freshmen Connection.</i>		

ARMY201

Army Leadership Development

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Sophomore standing or higher.

This course is an intensive examination of the Army Leadership Model in practice. The model is compared to leadership styles and techniques from government and industry and the comparative effectiveness of each. Students form their own personal leadership styles.

0101	James Choi, Marisa Pace, Ashley Miller	Seats (Total: 30)
	MWF 2:00pm - 2:50pm	ESJ 1309
0102	James Choi, Ashley Miller	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	ESJ B0320

ARMY301 Advanced Military Leadership I

Credits: 3 Grading Method: Regular

Reinforces understanding and application of Army leadership strategies, critical decision making methodologies, physical and mental fitness excellence. Includes a laboratory period in applied leadership, common military tasks and physical fitness.

0101	Marisa Pace, James Choi	Seats (Total: 40)
	Tu 3:30pm - 6:15pm	ESJ 1309

ARMY401 Advanced Military Leadership III

Credits: 3 Grading Method: Regular

Introduces contracted students to the study of Army structure, practices and processes exercised by Army Commanders and Staff in completing personnel, logistics, training and combat operations. Includes a laboratory in applied leadership skills and two field exercises.

0101	Marisa Pace	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	AJC 2134

ARSC Air Science Fall 2019

ARSC059 Air Force Officer Lab

Credits: 1 Grading Method: Sat-Fail

Offers Air Force ROTC cadet officer's practical experience in military leadership, management, organization, and customs. May include visits to military installations, weekend laboratories, and flight orientation.

Restriction: Must be an AFROTC cadet. Repeatable to 10 credits if content differs. Formerly: ARSC159. Additional information: This course does not carry any credit toward any degree at the University.

0101	Zachary Crampton	Seats (Total: 220)	
	Th 7:00am - 8:50am	ARM 0126	Lab
FC01	Zachary Crampton	Seats (Total: 10)	
	Th 7:00am - 8:50am	ARM 0126	Lab
<i>Restricted to students in Freshmen Connection.</i>			

ARSC100

The USAF Today I

Credits: 1

Grading Method: Regular

Corequisite: AFROTC cadets must also register for ARSC059.

Freshman course for AFROTC cadets. Introduces students to the United States Air Force and encourages participation in Air Force Reserve Officer Training Corps. Featured topics include: overview of ROTC, special programs offered through ROTC, mission and organization of the Air Force, brief history of the Air Force, introduction to leadership and leadership related issues, Air Force Core Values, Air Force officer opportunities, and an introduction to communication studies. Leadership laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experiences.

An elective but required for freshmen desiring the four-year AFROTC program.

0101	Steven Freund, Karson Peterson	Seats (Total: 27)	
	Tu 9:00am - 9:50am	WDS 1114	
0102	Karson Peterson, Steven Freund	Seats (Total: 84)	
	Th 9:00am - 9:50am	CSI 3117	
FC01	Karson Peterson, Steven Freund	Seats (Total: 10)	
	Tu 9:00am - 9:50am	WDS 1114	
<i>Restricted to students in Freshmen Connection.</i>			
FC02	Karson Peterson, Steven Freund	Seats (Total: 10)	
	Th 9:00am - 9:50am	SYM 0200	
<i>Restricted to students in Freshmen Connection.</i>			

ARSC200

The Development of Air Power I

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

Corequisite: AFROTC cadets must also register for ARSC059.

Sophomore course for AFROTC cadets. Study of factors contributing to the development of air power from its earliest beginnings through two world wars; the evolution of air power concepts and doctrine; introductory leadership; and assessment of communicative skills.

An elective, but required for sophomores in the four-year AFROTC program. Military cadets must also enroll in ARSC 159.

0101	Zachary Crampton	Seats (Total: 60)
	Th 10:00am - 10:50am	ESJ 2309
0103	Zachary Crampton	Seats (Total: 27)
	Tu 11:00am - 11:50am	ARM 0118

ARSC300 Management and Leadership I

(Perm req)

Credits: 3 Grading Method: Regular

Corequisite: AFROTC cadets must also register for ARSC059; or permission of UGST-AFROTC-Air Science. Restriction: Junior standing or higher.

The study of leadership and management fundamentals, professional knowledge, Air Force doctrine, and written and oral communication skills. Case studies are used to examine leadership and management situations. This course will satisfy credit toward a minor in military studies.

0101	Joshua Rager, David Bacot	Seats (Total: 35)
	Th 9:00am - 12:00pm	CHM 0122
0102	Joshua Rager, David Bacot	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ARM 0118
0103	Joshua Rager, David Bacot	Seats (Total: 20)
	MW 12:30pm - 2:00pm	ARM 0118

ARSC400 National Security Forces in Contemporary American Society I

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Permission of UGST-AFROTC-Air Science; or (ARSC300 or ARSC301). Corequisite: ARSC059; or permission of UGST-AFROTC-Air Science. Restriction: Senior standing.

Study of American national security policy and processes to include information and implementation, impact of major national and international actors, and development of major policy issues. This course will satisfy credit towards a minor in military studies.

0101	Isham Nichols	Seats (Total: 27)
	Th 9:00am - 12:00pm	ARM 0118
0102	Isham Nichols	Seats (Total: 18)
	TuTh 2:00pm - 3:30pm	ARM 0118
0103	Isham Nichols	Seats (Total: 15)
	MW 2:00pm - 3:30pm	ARM 0118

ARTH Art History & Archaeology Fall 2019

ARTH169A Special Topics in Study Abroad I; Roman Archaeology On-Site

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH169B Special Topics in Study Abroad I; Arts of Modernity

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH169I Special Topics in Study Abroad I; Art of Rome

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH200 Art and Society in Ancient and Medieval Europe and the Mediterranean

Credits: 3 Grading Method: Regular, CORE: HA General Education: DSHU,
Pass-Fail, Audit DVUP

Examines the material culture and visual expressions of Mediterranean and European societies from early times until ca. 1300 CE, emphasizing the political, social, and religious context of the works studied, the relationships of the works to the societies that created them, and the interrelationship of these societies.

0101	Louise Martinez	Seats (Total: 25)	
	MW 10:00am - 10:50am	ASY 2203	
	M 9:00am - 9:50am	ASY 3219	Discussion
0102	Louise Martinez	Seats (Total: 25)	
	MW 10:00am - 10:50am	ASY 2203	
	M 11:00am - 11:50am	ASY 3219	Discussion
0103	Louise Martinez	Seats (Total: 25)	
	MW 10:00am - 10:50am	ASY 2203	
	W 9:00am - 9:50am	ASY 3211	Discussion
0104	Louise Martinez	Seats (Total: 25)	
	MW 10:00am - 10:50am	ASY 2203	
	W 11:00am - 11:50am	ASY 3207	Discussion
0105	Louise Martinez	Seats (Total: 25)	
	MW 10:00am - 10:50am	ASY 2203	
	F 10:00am - 10:50am	ASY 3211	Discussion
0106	Louise Martinez	Seats (Total: 25)	
	MW 10:00am - 10:50am	ASY 2203	
	F 9:00am - 9:50am	ASY 3219	Discussion

ARTH201

Art and Society in the West from the Renaissance to the Present

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HA General Education: DSHU, DVUP

Examines representative European and American works of art from the later Middle Ages to the present, highlighting the dynamic exchange between artistic and cultural traditions both within periods and across time.

0101	Steven Mansbach	Seats (Total: 25)	
	MW 9:00am - 9:50am	ASY 2203	
	F 9:00am - 9:50am	ASY 3211	Discussion
0102	Steven Mansbach	Seats (Total: 25)	
	MW 9:00am - 9:50am	ASY 2203	
	M 10:00am - 10:50am	ASY 3215	Discussion

0103	Steven Mansbach	Seats (Total: 25)	
	MW 9:00am - 9:50am	ASY 2203	
	W 10:00am - 10:50am	ASY 3211	Discussion
0104	Steven Mansbach	Seats (Total: 25)	
	MW 9:00am - 9:50am	ASY 2203	
	M 11:00am - 11:50am	ASY 3215	Discussion
FC01	Abigail Upshaw	Seats (Total: 28)	
	MW 3:00pm - 4:15pm	ASY 3211	
	<i>Restricted to students in Freshmen Connection.</i>		

ARTH260

Art and Activism

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSHU,
SCIS

Can art effect social change? How may we use the history of radical and avant-garde art to inform present-day movements and models of artistic and creative activism? This course explores the modern and contemporary history of political art and arts activism on local, national, and global scales.

0101	Abigail McEwen	Seats (Total: 25)	
	MW 11:00am - 11:50am	TWS 0310	
	F 11:00am - 11:50am	ASY 3219	Discussion
0102	Abigail McEwen	Seats (Total: 25)	
	MW 11:00am - 11:50am	TWS 0310	
	Tu 9:30am - 10:20am	ASY 3219	Discussion
0103	Abigail McEwen	Seats (Total: 25)	
	MW 11:00am - 11:50am	TWS 0310	
	F 10:00am - 10:50am	ASY 3219	Discussion
0104	Abigail McEwen	Seats (Total: 20)	
	MW 11:00am - 11:50am	TWS 0310	
	M 9:00am - 9:50am	ASY 3211	Discussion
	<i>This section is restricted to students in Carillon Communities.</i>		

ARTH269A

Special Topics in Study Abroad II; Archaeology and Art of Ancient Italy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH269P Special Topics in Study Abroad II; From Medieval to Contemporary: Exploring the Great Art and Architecture of Prague

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH269R Special Topics in Study Abroad II; Art of Renaissance

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH303 Roman Art and Archaeology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Sites and monuments of painting, sculpture, architecture, and the minor arts from the earliest times through the third century A.D. with emphasis on the Italian peninsula from the Etruscan period through that of Imperial Rome.

0101	Maryl Gensheimer	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	ASY 3211

ARTH324 Leonardo's World: Art and Experience in Renaissance Italy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSHU

Painting, sculpture, architecture, and the decorative arts of the sixteenth century in Italy.

We will examine the history of painting, sculpture, architecture, and the decorative arts in Italy from the late fifteenth through the sixteenth centuries.

0101	Meredith Gill	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	ASY 3211

ARTH346 Nineteenth-Century European Art from 1850

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Major trends from Realism and Impressionism to Symbolism, exploring the historical context, in which concepts of gender, class, and race are integral to the transformation of Western art.

0101	Bart Pushaw	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	ASY 3215

ARTH359W Film as Art; The Screwball Comedy Film: Interrogating Gender, Class and Rationality

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The study of film as a visual art, from theoretical, cultural and aesthetic perspectives. Content varies by semester.

The Screwball Comedy was a variation on the classic form of romantic comedy that emerged during the Depression and offered timely reflections of American culture in the 1930s and 1940s and returned at the end of the Twentieth Century. Screwball powerful women and confused, flailing men battled their way through an unsettled world of extreme wealth and poverty, loose morals and flexible reality, a world that was intensely modern and on the go. Screwball comedy also has served as a stage on which to examine gender roles, from the biological to the socially constructed -- sex, sexiness and sexuality and changing definitions of class, wealth and sanity

0101	Greg Metcalf	Seats (Total: 25)
	W 3:30pm - 7:00pm	ASY 4213A

ARTH361 American Art Since 1876

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Painting, sculpture, architecture, and the decorative arts in North America after 1876.

0101	Tess Korobkin	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	ASY 3215

ARTH369C Special Topics in Study Abroad III; The Art of Florence: Exploring Visual Culture

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH369G Special Topics in Study Abroad III; Art Gallery Management

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH369P Special Topics in Study Abroad III; History and Workshop of Latin America Photography

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH369Q Special Topics in Study Abroad III; Patrons and Artists in Baroque Italy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTH370 Latin American Art and Archaeology before 1500

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Pre-Hispanic painting, sculpture, and architecture, with a focus on the major archaeological monuments of Mexico.

0101	Beryl Bland	Seats (Total: 23)
	W 2:00pm - 4:30pm	ASY 3217
<i>Suz-04/23/19 Reduced seats offered from 25 to 23 per phone conversation with Deb Downs in ARTH to fit the room which only offers 23 seats.</i>		

ARTH386 Experiential Learning

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

General Education: DSSP

Prerequisite: Permission of ARHU-Art History & Archaeology department. Restriction: Junior standing or higher.

Supervised internship experience in diverse areas of art historical, archaeological, and museological work.

Contact department for information to register for this course.

ARTH389A Special Topics in Art History and Archaeology; The Art of Drawing: A Left and Right Brain Experience

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

This course examines Old and Modern Master Drawings, theories of drawing and drawing practice. Lectures will discuss Dr. Betty Edward's theory of a verbal, analytical Left Brain and a visual, perceptual Right Brain. As practice, students will learn to make the mental shift from left, analytical brain to right, visual brain. Class exercises are based on Betty Edward's text, *Drawing on the Right Side of the Brain*. No prior drawing experience is necessary.

0101	Beryl Bland	Seats (Total: 10)
	W 10:00am - 12:30pm	ASY 4306

ARTH389B Special Topics in Art History and Archaeology; The Art of Color: A Left and Right Brain Experience

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

This course is about understanding color and experiencing color. The course is composed of two parts, a lecture and color practice. The lectures examine a wide range of old and modern master paintings from Antiquity to the Twentieth Century. The lectures also examine how artists use color in a variety of media to distinctively record their surroundings, express their emotions and explore the aesthetics of color applications. The practice portion of this course is composed of color/painting assignments that challenge students beyond color theory. Students will complete a series of exercises based on Dr. Betty Edward's text, *Color, A Course in Mastering the Art of Mixing Color*. No prior drawing or painting experience is necessary. However, students should be willing to extend a concerted amount of time and effort on each studio assignment.

0101	Beryl Bland	Seats (Total: 10)
	F 10:00am - 12:30pm	ASY 2318

ARTH389D Special Topics in Art History and Archaeology; Art and War

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

This course presents key examples of artworks on the subject of war, ranging from antiquity to the twenty-first century. Class meetings will involve active discussion of ancient artifacts, of paintings by old masters such as Velazquez and Goya and of those closer to our time, such as the German expressionists Ernst Ludwig Kirchner and Max Beckmann, and of our contemporaries, such as Anselm Kiefer. Students will learn through first-hand experience, including visits to museums and memorial sites, and discussions with art practitioners who have explored war in their own work or have lived through war conflicts.

0101	Aneta Georgievska-Shine	Seats (Total: 25)
	Tu 2:00pm - 4:30pm	ASY 3211

ARTH389V Special Topics in Art History and Archaeology; South Asian Art and Architecture in Context

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

This survey of South Asian art emphasizes the material traditions, cultural contexts, and physical geography of its artifacts. Conditions of making, use, continuity, and transformation will be explored through specific objects.

0101	Divya Kumar-Dumas	Seats (Total: 25)
	TuTh 9:30am - 10:45am	ASY 3215

ARTH488F Colloquium in Art History; Mexican Muralism: Nation, Race, Revolution

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Colloquium to investigate a specific topic in depth.

This course examines the work of "Los Tres Grandes"- Diego Rivero, David Alfaro Siqueiros, and Jose Clemente Orozco- and their contemporaries in Mexico and the United States between approximately 1920 and 1960.

0101	Abigail McEwen	Seats (Total: 12)
	W 3:00pm - 5:30pm	ASY 3215

ARTH488W Colloquium in Art History; Monuments and Memory in America

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Colloquium to investigate a specific topic in depth.

This course investigates the political and cultural work of monuments in the United States since the Civil War. Taking recent struggles over the presence and removal of Confederate monuments as our starting point, we will consider issues of race and representation, memory and memorialization, appropriation and iconoclasm. How do monuments embody cultural values, consolidate power structures, and become sites for mourning and protest? We will examine war memorials, civic statuary, city beautification projects, and abstract public works, including Maya Lin's Vietnam Veterans Memorial (1982) and the recently opened Equal Justice Initiative's Memorial to Peace and Justice in Alabama. We will also explore how contemporary artists such as Tatsu Nishi, Titus Kaphar, Krzysztof Wodiczko, and Kara Walker, whose ephemeral installations, photographic projections, and new sculptural bodies challenge and reinvent conventions of monumentality.

0101	Tess Korobkin	Seats (Total: 12)
	TuTh 11:00am - 12:15pm	ASY 3215

ARTH4890 Special Topics in Art History; Art in the Museum World

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

This course is intended for upper division students majoring in art history, but it is open to anyone interested in the museum world. Its main goal is to introduce various facets of museum work and possible career paths within that environment. Many of the meetings will take place in museums and other art institutions in the Washington area. Each of them will address a particular aspect of museum work through a conversation with museum professionals and/or guided tours through different departments. Topics to be discussed include, but are not limited to, curatorial work, collection display and preservation, and outreach programs that promote a more meaningful relationship between museums and their audiences.

0101	Aneta Georgievska-Shine	Seats (Total: 15)
	F 2:00pm - 4:30pm	ASY 3215

ARTH498 Directed Studies in Art History I

(Perm req)

Credits: 2-3 Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

ARTH499 Honors Thesis

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

ARTH692 Methods of Art History

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Methods of research and criticism applied to typical art-historical problems; bibliography and other research tools.

For all non-Art History and Archaeology majors, permission of the department is required.

0101	Anthony Colantuono	Seats (Total: 6)
	M 12:00pm - 2:30pm	ASY 4304

ARTH749C Seminar in Nineteenth-Century European Art; Mary Cassat, Berthe Morisot: Gender and Impressionism

Credits: 3 Grading Method: Regular,
Audit

0101	Mary Morton	Seats (Total: 6)
	W 3:00pm - 5:30pm	ASY 4304

ARTH758A Seminar in American Art; The Athletic Turn

Credits: 3 Grading Method: Regular,
Audit

0101	Jordana Saggese	Seats (Total: 6)
	Th 12:00pm - 2:30pm	ASY 4304

ARTH798 Directed Graduate Studies in Art History

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Contact department for information to register for this course.

ARTH799 Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ARTH898 Pre-Candidacy Research

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ARTH899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

ARTT Art Studio

Fall 2019

ARTT100 Two-Dimensional Design Fundamentals

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP

Principles and elements of two-dimensional design. Introduction to visual communication.

Students must pay a \$40.00 laboratory studio fee.

0101	Matthew McLaughlin TuTh 12:30pm - 3:00pm	Seats (Total: 18) ASY 2318	Lab
0201	Matthew McLaughlin TuTh 12:30pm - 3:00pm	Seats (Total: 18) ASY 2318	Lab
0501	Wendy Jacobs MW 12:30pm - 3:00pm	Seats (Total: 18) ASY 2318	Lab
0601	Wendy Jacobs MW 12:30pm - 3:00pm	Seats (Total: 18) ASY 2318	Lab
0701	Wendy Jacobs MW 3:30pm - 6:00pm	Seats (Total: 18) ASY 2318	Lab
0801	Wendy Jacobs MW 3:30pm - 6:00pm	Seats (Total: 18) ASY 2318	Lab

ARTT110**Elements of Drawing I**

Credits: 3

Grading Method: Regular,
Pass-Fail

General Education: DSSP

Fundamental concepts, media, and processes of drawing. Emphasis on observation and representation in combination with individual expression. Subject matter includes still life, human figure, nature, the built environment, and conceptual projects.

Students must pay a \$40.00 laboratory studio fee.

0101	Irene Pantelis MW 9:00am - 11:30am	Seats (Total: 18) ASY 2317	Lab
0201	Irene Pantelis MW 9:00am - 11:30am	Seats (Total: 18) ASY 2321	Lab
0501	Leslie Berns TuTh 9:00am - 11:30am	Seats (Total: 18) ASY 2317	Lab
0701	Rachel Scully MW 3:30pm - 6:00pm	Seats (Total: 18) ASY 2321	Lab

0801	Rachel Scully MW 3:30pm - 6:00pm	Seats (Total: 18) ASY 2317	Lab
0901	Brandon Donahue TuTh 12:30pm - 3:00pm	Seats (Total: 18) ASY 2317	Lab
1001	Brandon Donahue TuTh 12:30pm - 3:00pm	Seats (Total: 18) ASY 2321	Lab
1101	Jowita Wyszomirska MW 12:30pm - 3:00pm	Seats (Total: 18) ASY 2321	Lab
1201	Jowita Wyszomirska MW 12:30pm - 3:00pm	Seats (Total: 18) ASY 2317	Lab
FC01	Peter Cullen MW 6:00pm - 8:30pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 14) ASY 2321	

ARTT110S

Elements of Drawing I

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP

Fundamental concepts, media, and processes of drawing. Emphasis on observation and representation in combination with individual expression. Subject matter includes still life, human figure, nature, the built environment, and conceptual projects.

Restricted to College Park Scholars - Arts. Students must pay a \$40.00 laboratory studio fee.

0601	Leslie Berns TuTh 9:00am - 11:30am	Seats (Total: 18) ASY 2321	Lab
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ARTT150

Introduction to Art Theory

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: HA

General Education: DSHU

Fundamental concepts of global, philosophic, and critical art theory examined through various historic and contemporary texts, and the analysis of works of art.

0101	Richard Klank MW 1:00pm - 1:50pm M 11:00am - 11:50am	Seats (Total: 25) ASY 2309 ASY 3211	Discussion
0102	Richard Klank MW 1:00pm - 1:50pm W 11:00am - 11:50am	Seats (Total: 25) ASY 2309 ASY 3219	Discussion
0103	Richard Klank MW 1:00pm - 1:50pm W 12:00pm - 12:50pm	Seats (Total: 25) ASY 2309 ASY 3211	Discussion
0201	Rex Weil TuTh 3:30pm - 4:20pm Tu 2:00pm - 2:50pm	Seats (Total: 25) ASY 2309 ASY 3219	Discussion
0202	Rex Weil TuTh 3:30pm - 4:20pm Th 2:30pm - 3:20pm	Seats (Total: 25) ASY 2309 ASY 3219	Discussion
0203	Rex Weil TuTh 3:30pm - 4:20pm Th 12:30pm - 1:20pm	Seats (Total: 25) ASY 2309 ARC 1103	Discussion
FC01	Rex Weil TuTh 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 20) ASY 3211	

ARTT200

Three-Dimensional Art Fundamentals

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ARTT100 and ARTT110.

Fundamental concepts of three-dimensional form and space examined through the manipulation and organization of various materials.

Students must pay a \$40.00 laboratory studio fee.

0101	Cy Keener MW 9:00am - 11:30am	Seats (Total: 18) ASY 1311	Lab
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0201	Jeremy Kunkel	Seats (Total: 18)	
	TuTh 12:30pm - 3:00pm	ASY 1311	Lab
0301	Michael Thron	Seats (Total: 18)	
	MW 12:30pm - 3:00pm	ASY 1311	Lab

ARTT210
Elements of Drawing II

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ARTT110.
Continuation of ARTT110 with additional emphasis on color, figure drawing, and contemporary issues.

Students must pay a \$40.00 laboratory studio fee.

0101	Emily Conover	Seats (Total: 16)	
	TuTh 12:30pm - 3:00pm	ASY 2315	Lab
0201	Peter Cullen	Seats (Total: 16)	
	MW 3:30pm - 6:00pm	ASY 2315	Lab
0301	Leah Laird	Seats (Total: 16)	
	MW 12:30pm - 3:00pm	ASY 2315	Lab
0401	Ryan Syrell	Seats (Total: 16)	
	TuTh 3:30pm - 6:00pm	ASY 2315	Lab

ARTT255
Introduction to Digital Art and Design Processes

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ARTT100 and ARTT110. Credit only granted for: ARTT255 or ARTT354. Formerly: ARTT354.
Introduction to basic software and principles of digital imaging, and how they are applied to art and design. Topics covered: Digital image construction and manipulation, Vector-Based digital techniques layout, typography, etc), time-based digital techniques (video and audio composition and manipulation), and basic interactivity (web-design). Digital media used to explore visual principles established in ARTT100.

Students must pay a \$40.00 laboratory studio fee.

0101	Narendra Ratnapala	Seats (Total: 18)	
	TuTh 12:30pm - 3:00pm	ATL 1410	Lab
0201	Narendra Ratnapala	Seats (Total: 18)	
	TuTh 3:30pm - 6:00pm	ATL 1410	Lab
0301	Shannon Collis	Seats (Total: 24)	
	MW 1:00pm - 3:30pm	ATL 1410	Lab

ARTT269R Special Topics in Study Abroad II; Art of Renaissance

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTT320 Elements of Painting

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Concepts and fundamental processes of oil and/or acrylic painting.

Students must pay a \$40.00 laboratory studio fee.

0101	Matthew Robertson	Seats (Total: 18)	
	TuTh 12:30pm - 3:00pm	ASY 3312	Lab
	<i>Emphasizes acrylic paint.</i>		
0201	Richard Klank	Seats (Total: 13)	
	MW 9:00am - 11:30am	ASY 3322	Lab
0301	Leah Laird	Seats (Total: 18)	
	MW 3:30pm - 6:00pm	ASY 3322	Lab

ARTT330 Elements of Sculpture: Metal Casting

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Sculptural concepts and fundamental processes related to metal casting.

Students must pay a \$40.00 laboratory studio fee.

0101	John Ruppert	Seats (Total: 12)	
	MW 12:30pm - 3:00pm	ASY 1310	Lab

ARTT330H **Elements of Sculpture: Metal Casting**

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Sculptural concepts and fundamental processes related to metal casting.

Students must pay a \$40.00 laboratory studio fee. This course is restricted to departmental honors students only.

0101	John Ruppert	Seats (Total: 2)	
	MW 12:30pm - 3:00pm	ASY 1310	Lab

ARTT331 **Elements of Sculpture: Steel**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Sculptural concepts and fundamental processes related to steel fabrication; torch cutting, welding, hot forging, and finishing.

Students must pay a \$40.00 laboratory studio fee.

0101	John Ruppert	Seats (Total: 10)	
	MW 3:00pm - 5:30pm	ASY 1314	Lab

ARTT333 **Elements of Sculpture: Wood and Mixed Media**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Sculptural concepts and fundamental processes using wood and mixed media.

Students must pay a \$40.00 laboratory studio fee.

0101	Jeremy Kunkel	Seats (Total: 12)	
	TuTh 3:00pm - 5:30pm	ASY 1311	Lab

ARTT333H Elements of Sculpture: Wood and Mixed Media

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Sculptural concepts and fundamental processes using wood and mixed media.

This course is restricted to departmental honors students only. Students must pay a \$40.00 laboratory studio fee.

0101	Foon Sham	Seats (Total: 2)	
	TuTh 3:00pm - 5:30pm	ASY 1311	Lab

ARTT341 Elements of Printmaking: Woodcut and Relief

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Concepts and fundamental processes related to woodcuts, linocuts, and other relief printing media.

There is a \$40.00 lab fee for this course.

0101	Lauren Koch	Seats (Total: 12)	
	MW 9:00am - 11:30am	ASY 1317	Lab

ARTT341H Elements of Printmaking: Woodcut and Relief

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Concepts and fundamental processes related to woodcuts, linocuts, and other relief printing media.

There is a \$40.00 lab fee for this course. This course is restricted to departmental honors students only.

0101	Lauren Koch	Seats (Total: 2)	
	MW 9:00am - 11:30am	ASY 1317	Lab

ARTT343**Elements of Printmaking: Screen Printing**

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Concepts and fundamental processes related to silkscreen printing.

Students must pay a \$40.00 laboratory studio fee.

0101	Jessica Gatlin	Seats (Total: 12)	
	TuTh 12:30pm - 3:00pm	ASY 1317	Lab
0201	Jessica Gatlin	Seats (Total: 12)	
	TuTh 3:30pm - 6:00pm	ASY 1317	Lab

ARTT343H**Elements of Printmaking: Screen Printing**

(Perm req)

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Concepts and fundamental processes related to silkscreen printing.

This course is restricted to departmental honors students only. Students must pay a \$40.00 laboratory studio fee.

0101	Jessica Gatlin	Seats (Total: 2)	
	TuTh 12:30pm - 3:00pm	ASY 1317	Lab
0201	Jessica Gatlin	Seats (Total: 2)	
	TuTh 3:30pm - 6:00pm	ASY 1317	Lab

ARTT353**Elements of Photography**

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Prerequisite: ARTT200, ARTT210, and ARTT150; or permission of ARHU-Art department.

Introduction to black-and-white photography. Basic technical and aesthetic vocabulary, camera mechanics and darkroom techniques. Introduction to the photographic message and meaning in both fine art and design concept.

Students must pay a \$40.00 laboratory studio fee. SLR film camera required.

Contact department for information to register for this course.

ARTT355 Intermediate Graphic Design Principles

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ARTT150, ARTT200, ARTT210, and ARTT255; and must be admitted to the Graphic Design Concentration (Track 3). Credit only granted for: ARTT350 or ARTT355. Formerly: ARTT350.

Investigation of basic concepts, history, techniques, and materials used by professional graphic designers, focusing on typography. Explores various aspects of design related to typography through examination and production of many types of finished work.

Students must pay \$40.00 laboratory studio fee.

0101	Audra Buck-Coleman	Seats (Total: 25)	
	MW 9:00am - 11:30am	ASY 2322	Lab

ARTT356 Graphic Design Processes

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ARTT150, ARTT200, ARTT210, and ARTT255; and must have been admitted to Graphic Design Concentration (Track 3). Credit only granted for: ARTT351 or ARTT356. Formerly: ARTT351.

Explores computer graphics and visual communication principles in a time-based context. Examination of fundamental design principles through digital projects that involve photo manipulation, digital illustration, layout, animation, and web design.

Students must pay \$40.00 laboratory studio fee.

0101	Rieko Chacey	Seats (Total: 25)	
	TuTh 9:00am - 11:30am	ASY 2322	Lab

ARTT369P Special Topics in Study Abroad III; Spain Seen by PhotographyCredits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTT370 Elements of Digital MediaCredits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ARTT150, ARTT200, ARTT210, and ARTT255; or permission of ARHU-Art department.

Exploration of image creation and manipulation, interactivity, and linkages between digital audio and video. Emphasis on issues in contemporary digital art.

Students must pay \$40.00 laboratory studio fee.

0101	Brandon Morse	Seats (Total: 14)	
	TuTh 12:30pm - 3:00pm	ASY 3304	Lab
0201	Brandon Morse	Seats (Total: 14)	
	TuTh 3:00pm - 5:30pm	ASY 3304	Lab

ARTT386**Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Prerequisite: Permission of ARHU-Art department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

ARTT389**Department of Art Undergraduate Teaching Assistantship**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Individual contractual agreement with faculty/mentor. Individualized assistantship in the teaching of a specified department course offering. Must have previously received an "A" grade for the class to be assisting.

Contact department for information to register for this course.

ARTT399**Department of Art Research Assistantship**

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Individual contractual agreement with faculty/mentor. Individualized experiential learning developed in relation to art-related research issues.

Contact department for information to register for this course.

ARTT409K**Study Abroad Special Topics IV; New Media**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ARTT418B Advanced Drawing Studio; A Contemporary Approach

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Multi-level drawing studio emphasizing advanced concepts and processes related to drawing; emphasis on contemporary art issues and individual directions.

Prerequisite: ARTT150, ARTT200, and ARTT210; plus one 300-level studio course; or permission of department. Students must pay a \$40.00 laboratory studio fee. Repeatable to 12 credits. Multi-level drawing studio emphasizing advanced concepts and processes related to drawing; emphasis on contemporary art issues and individual directions.

0101	Matthew McLaughlin	Seats (Total: 16)	
	MW 12:30pm - 3:00pm	ASY 2314	Lab
0301	Jowita Wyszomirska	Seats (Total: 16)	
	MW 3:30pm - 6:00pm	ASY 2314	Lab

ARTT418H Advanced Drawing Studio; Honors

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Multi-level drawing studio emphasizing advanced concepts and processes related to drawing; emphasis on contemporary art issues and individual directions.

Restricted to departmental honors students only. Students must pay a \$40.00 laboratory studio fee.

0101	Matthew McLaughlin	Seats (Total: 2)	
	MW 12:30pm - 3:00pm	ASY 2314	Lab
0301	Jowita Wyszomirska	Seats (Total: 2)	
	MW 3:30pm - 6:00pm	ASY 2314	Lab

ARTT428 Advanced Painting Studio; Painting

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Multi-level painting studio emphasizing advanced concepts and processes related to oil and acrylic painting; emphasis on contemporary art issues and individual directions in chosen media.

Prerequisite: ARTT320 or permission of the department. Students must pay a \$40.00 laboratory studio fee. Repeatable to 12 credits. Multi-level painting studio emphasizing advanced concepts and processes related to oil and acrylic painting; emphasis on contemporary art issues and individual directions.

0101	Leslie Berns	Seats (Total: 18)	
	TuTh 12:30pm - 3:00pm	ASY 3318	Lab
0201	Emily Conover	Seats (Total: 18)	
	TuTh 3:30pm - 6:00pm	ASY 3316	Lab
	<i>Emphasizes acrylic paint.</i>		
0301	Richard Klank	Seats (Total: 8)	
	MW 9:00am - 11:30am	ASY 3322	Lab

ARTT428H **Advanced Painting Studio; Honors**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Multi-level painting studio emphasizing advanced concepts and processes related to oil and acrylic painting; emphasis on contemporary art issues and individual directions in chosen media.

Restricted to departmental honors students only. Students must pay a \$40.00 laboratory studio fee.

0101	Leslie Berns	Seats (Total: 2)	
	TuTh 12:30pm - 3:00pm	ASY 3322	
0201	Emily Conover	Seats (Total: 2)	
	TuTh 3:30pm - 6:00pm	ASY 3312	
	<i>Emphasizes Acrylic Paint</i>		
0301	Richard Klank	Seats (Total: 2)	
	MW 9:00am - 11:30am	ASY 3318	

ARTT428X **Advanced Painting Studio; Advanced Painting Studio**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Multi-level painting studio emphasizing advanced concepts and processes related to oil and acrylic painting; emphasis on contemporary art issues and individual directions in chosen media.

Contact department for information to register for this course.

ARTT438A **Advanced Sculpture Studio; Metal Casting and Mixed Media**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Multi-level sculpture studio; continuation of media-specific sculpture courses with emphasis on contemporary art issues and individual directions in chosen media.

Prerequisite: ARTT330 or permission of department. Students must pay a \$40.00 studio laboratory fee.

0101	John Ruppert	Seats (Total: 4)	
	MW 12:30pm - 3:00pm	ASY 1310	Lab

ARTT438C Advanced Sculpture Studio; Steel and Mixed Media Sculpture

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Multi-level sculpture studio; continuation of media-specific sculpture courses with emphasis on contemporary art issues and individual directions in chosen media.

Prerequisite: ARTT331 or permission of instructor. Students must pay a \$40.00 laboratory studio fee. Repeatable to 12 credits. Multi-level sculpture studio; continuation of media-specific sculpture courses with emphasis on contemporary art issues and individual directions in chosen media.

0101	John Ruppert	Seats (Total: 4)	
	MW 3:00pm - 5:30pm	ASY 1314	Lab

ARTT438D Advanced Sculpture Studio; Wood and Mixed Media

(Perm req) Grading Method: Regular,
Credits: 3 Pass-Fail, Audit

Multi-level sculpture studio; continuation of media-specific sculpture courses with emphasis on contemporary art issues and individual directions in chosen media.

Students must pay a \$40.00 laboratory studio fee. Repeatable to 12 credits. Multi-level sculpture studio; continuation of media-specific sculpture courses with emphasis on contemporary art issues and individual directions in chosen media.

0101	Foon Sham	Seats (Total: 4)	
	TuTh 3:00pm - 5:30pm	ASY 1311	Lab

ARTT438H Advanced Sculpture Studio; Honors Sculpture

(Perm req) Grading Method: Regular,
Credits: 3 Pass-Fail, Audit

Multi-level sculpture studio; continuation of media-specific sculpture courses with emphasis on contemporary art issues and individual directions in chosen media.

Restricted to departmental honors students only. Students must pay a \$40.00 laboratory studio fee.

0101	Foon Sham	Seats (Total: 2)	
	TuTh 3:00pm - 5:30pm	ASY 1311	Lab
0201	John Ruppert	Seats (Total: 2)	
	MW 3:00pm - 5:30pm	ASY 1314	Lab
0301	John Ruppert	Seats (Total: 2)	
	MW 12:30pm - 3:00pm	ASY 1314	Lab

ARTT448H Advanced Printmaking Studio; Honors Printmaking Studio

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Multi-level printmaking studio; continuation of media-specific printmaking courses with emphasis on contemporary art issues and individual directions in chosen media.

Prerequisite: 300-level printmaking course and admission to Department Honors Program. Permission of Department required. Students must pay a \$40.00 studio lab fee.

0101	Justin Strom	Seats (Total: 2)	
	TuTh 12:30pm - 3:00pm	ASY 1317	Lab
0201	Justin Strom	Seats (Total: 2)	
	TuTh 3:30pm - 6:00pm	ASY 1317	Lab

ARTT454 Advanced Graphic Design Principles: Design in Society

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ARTT355 and ARTT356.

Focus on social responsibility and community activism. History and theory of propaganda and advocacy-based design. Students explore current design practices, work individually, and collaborate in teams with non-profits or other clients with community-based or socio-cultural agendas. Research and writing-intensive course.

\$40 laboratory studio fee.

0101	Audra Buck-Coleman	Seats (Total: 25)	
	MW 12:30pm - 3:00pm	ASY 2322	Lab

ARTT457 Advanced Interactive Design

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: ARTT357.

Advanced concepts and techniques of interactive design and interactive software. Examination of corporate, client-based, and public service-based interactive graphic design. Emphasis on web-based interactive design structures.

\$40 laboratory studio fee.

0101	Rieko Chacey	Seats (Total: 20)	
	TuTh 12:30pm - 3:00pm	ASY 2322	Lab

ARTT460

Seminar in Art Theory

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Senior standing.

Exploration of relationship between content and processes of art in a contemporary multi-cultural context.

Contact department for information to register for this course.

ARTT468A

Seminar on the Interrelationship Between Art and Art Theory

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

The relationship between a student's work and the theoretical context of contemporary art.

Contact department for information to register for this course.

ARTT468W

Seminar on the Interrelationship Between Art and Art Theory; History and Workshop of Latin America Photography

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

The relationship between a student's work and the theoretical context of contemporary art.

Contact department for information to register for this course.

ARTT479A

Advanced Digital Media Studio; Code and Form

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Variable multi-level studio emphasizing advanced concepts and processes related to time-based, projection, installation, interactive, and audio/visual integrated digital art. Emphasis on contemporary art issues and individual directions.

There is a \$40.00 studio lab fee. Advanced level course in Digital Media emphasizing contemporary practices and theories in the area of Digital Fabrication. 3-D modeling, 3-D printing and related digital fabrication techniques are covered.

0101	Cy Keener	Seats (Total: 14)	
	MW 12:30pm - 3:00pm	ASY 3304	Lab

ARTT479D Advanced Digital Media Studio; Immersive and Virtual Environments

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Variable multi-level studio emphasizing advanced concepts and processes related to time-based, projection, installation, interactive, and audio/visual integrated digital art. Emphasis on contemporary art issues and individual directions.

Introduction to the uses of game development software in an artistic context. Practical examination of interactive, immersive and installation art as mediated through the context of real-time computer generated imagery and game engine methodologies.

0101	Mollye Bendell	Seats (Total: 14)	
	MW 3:00pm - 5:30pm	ASY 3304	

ARTT479H Advanced Digital Media Studio; Honors Advanced Digital Media

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Variable multi-level studio emphasizing advanced concepts and processes related to time-based, projection, installation, interactive, and audio/visual integrated digital art. Emphasis on contemporary art issues and individual directions.

Advanced digital media honors studio with course content corresponding to the 479A, 479D, 479E course sharing the same time, day and room on the schedule above.

0101	Mollye Bendell	Seats (Total: 2)	
	MW 3:00pm - 5:30pm	ASY 3304	
	<i>Honors Immersive and Virtual Environments.</i>		

0301	Cy Keener	Seats (Total: 2)	
	MW 12:30pm - 3:00pm	ASY 3304	Lab
<i>Honors Code and Form.</i>			

ARTT480H

Honors Seminar

(Perm req)

Credits: 3

Grading Method: Regular

Team-taught seminar focusing on relationship between student's work and the theoretical context of contemporary art.

Students must pay \$40.00 laboratory fee.

0101	Shannon Collis	Seats (Total: 7)	
	F 10:00am - 1:30pm	ASY 2311	Lab

ARTT481

Advanced Specialization Seminar

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Permission of ARHU-Art department.

Seminar combines contemporary art theory, criticism, professional practice and career preparation in relation to students works from all areas of specialization.

0101	Ryan Syrell	Seats (Total: 15)	
	Tu 6:00pm - 8:30pm	ASY 2314	

ARTT489C

Advanced Special Topics in Art; Markets and Collecting

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Advanced studio art and theory within the context of a special topic.

0101	Rex Weil	Seats (Total: 15)	
	Th 11:30am - 2:00pm	ASY 3219	

ARTT489I

Advanced Special Topics in Art; Digital Imaging

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Advanced studio art and theory within the context of a special topic.

Prerequisite: ARTT354. Students must pay a \$40.00 laboratory studio fee.

Contact department for information to register for this course.

ARTT489N Advanced Special Topics in Art; Design in Illustration

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Advanced studio art and theory within the context of a special topic.

Prerequisite: ARTT210. This course may not be used to satisfy the studio art elective requirement for the Graphic Design Concentration-Track 3. Students must pay a \$40.00 studio lab fee.

0101	Matthew McLaughlin	Seats (Total: 20)	
	TuTh 9:00am - 11:30am	ASY 2318	Lab

ARTT489R Advanced Special Topics in Art; New Media

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Advanced studio art and theory within the context of a special topic.

Contact department for information to register for this course.

ARTT498A Directed Studies in Studio Art

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Advanced independent work in Studio Art. Meeting with faculty and studio time arranged.

Students must pay a \$40.00 studio lab fee.

Contact department for information to register for this course.

ARTT498B Directed Studies in Studio Art

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Advanced independent work in Studio Art. Meeting with faculty and studio time arranged.

Students must pay a \$40.00 studio lab fee.

Contact department for information to register for this course.

ARTT498H Directed Studies in Studio Art; Honors Thesis

(Perm req)

Credits: 2-3

Grading Method: Regular,
Pass-Fail, Audit

Advanced independent work in Studio Art. Meeting with faculty and studio time arranged.

Restricted to departmental honors students only. Prerequisite: permission of department. Students must pay a \$40.00 studio lab fee.

Contact department for information to register for this course.

ARTT498I

Directed Studies in Studio Art; Animation, Editing, and Special Effects

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Advanced independent work in Studio Art. Meeting with faculty and studio time arranged.

Contact department for information to register for this course.

ARTT618

Drawing; Drawing

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Independent studies in drawing for advanced special students.

Students must pay a \$60.00 studio lab fee.

Contact department for information to register for this course.

ARTT628

Painting; Painting

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Graduate painting for advanced special students.

Students must pay a \$60.00 studio lab fee.

Contact department for information to register for this course.

ARTT638

Sculpture; Sculpture

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Independent studies in sculpture for advanced special students.

Students must pay a \$60.00 studio lab fee.

Contact department for information to register for this course.

ARTT648

Printmaking; Printmaking

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Independent studies in printmaking for advanced special students.

Students must pay a \$60.00 studio lab fee.

Contact department for information to register for this course.

ARTT698A

Directed Graduate Studies in Studio Art

(Perm req)

Credits: 1-4

Grading Method: Regular,
Audit

Independent work. Meetings with faculty and studio time arranged.

Students must pay a \$60.00 studio lab fee.

Contact department for information to register for this course.

ARTT698B

Directed Graduate Studies in Studio Art

(Perm req)

Credits: 1-4

Grading Method: Regular,
Audit

Independent work. Meetings with faculty and studio time arranged.

Students must pay a \$60.00 studio lab fee.

Contact department for information to register for this course.

ARTT698C

Directed Graduate Studies in Studio Art; Graduate Teaching Practicum

(Perm req)

Credits: 1-4

Grading Method: Regular,
Audit

Independent work. Meetings with faculty and studio time arranged.

Students must pay a \$60.00 studio lab fee.

Contact department for information to register for this course.

ARTT699A

Directed Graduate Studies in Studio Art

(Perm req)

Credits: 1-4

Grading Method: Regular,
Audit

Independent graduate studies.

Students must pay a \$60.00 studio lab fee.

Contact department for information to register for this course.

ARTT699B**Directed Graduate Studies in Studio Art**

(Perm req)

Credits: 1-4

Grading Method: Regular,
Audit*Independent graduate studies.*

Students must pay a \$60.00 studio lab fee.

Contact department for information to register for this course.

ARTT718**Drawing; Drawing**

(Perm req)

Credits: 3

Grading Method: Regular,
Audit*Independent studies in drawing for advanced special students.*

Students must pay a \$60.00 studio lab fee.

Contact department for information to register for this course.

ARTT728**Painting; Painting**

(Perm req)

Credits: 3

Grading Method: Regular,
Audit*Independent studies in painting for advanced special students.*

Students must pay a \$60.00 studio lab fee.

Contact department for information to register for this course.

ARTT738**Sculpture; Sculpture**

(Perm req)

Credits: 3

Grading Method: Regular,
Audit*Independent studies in sculpture for advanced special students.*

Students must pay a \$60.00 studio lab fee.

Contact department for information to register for this course.

ARTT748**Printmaking; Printmaking**

(Perm req)

Credits: 3

Grading Method: Regular,
Audit*Independent studies in printmaking for advanced special students.*

Students must pay a \$60.00 studio lab fee.

Contact department for information to register for this course.

ARTT768**Graduate Colloquium**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

*Examines various aspects of art, art theory and criticism in a contemporary and multi-cultural context.
Relates student work to this context.*

Students must pay a \$60.00 laboratory studio fee.

0101	Cy Keener	Seats (Total: 20)
	Th 6:30pm - 9:30pm	MMH 0401

ARTT798A**Directed Graduate Studies in Studio Art**

(Perm req)

Credits: 1-4

Grading Method: Regular,
Audit

Independent graduate studies.

Students must pay a \$60.00 studio lab fee.

Contact department for information to register for this course.

ARTT798B**Directed Graduate Studies in Studio Art**

(Perm req)

Credits: 1-4

Grading Method: Regular,
Audit

Independent graduate studies.

Students must pay a \$60.00 studio lab fee.

Contact department for information to register for this course.

ARTT799**Master's Thesis Research**

Credits: 1-6

Grading Method: Regular

Contact department for information to register for this course.

ASTR**Astronomy****Fall 2019**

ASTR100**Introduction to Astronomy**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: PS

General Education: DSNS

Credit only granted for: ASTR100, ASTR101, or ASTR120.

An elementary course in descriptive astronomy, especially appropriate for non-science students. Topics include the Sun, Moon, planets, stars, and nebulae, galaxies, and evolution of the Universe.

0101	Leo Deming	Seats (Total: 40)	
	TuTh 9:30am - 10:45am	PHY 1412	
	M 1:00pm - 1:50pm	ATL 2400	Discussion
0102	Leo Deming	Seats (Total: 40)	
	TuTh 9:30am - 10:45am	PHY 1412	
	M 2:00pm - 2:50pm	ATL 2400	Discussion
0103	Leo Deming	Seats (Total: 40)	
	TuTh 9:30am - 10:45am	PHY 1412	
	M 3:00pm - 3:50pm	ATL 2400	Discussion
0104	Leo Deming	Seats (Total: 40)	
	TuTh 9:30am - 10:45am	PHY 1412	
	F 10:00am - 10:50am	ATL 2400	Discussion
0105	Leo Deming	Seats (Total: 40)	
	TuTh 9:30am - 10:45am	PHY 1412	
	F 11:00am - 11:50am	ATL 2400	Discussion
0106	Leo Deming	Seats (Total: 40)	
	TuTh 9:30am - 10:45am	PHY 1412	
	F 12:00pm - 12:50pm	ATL 2400	Discussion
FC01	James Hunt	Seats (Total: 30)	
	TuTh 6:00pm - 7:15pm	ATL 2400	
	F 1:00pm - 1:50pm	ATL 2400	Discussion
<i>Restricted to students in Freshmen Connection.</i>			

ASTR101

General Astronomy

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: PL General Education: DSNL

Credit only granted for: ASTR100, ASTR101, or ASTR120.

Descriptive astronomy, appropriate for non-science majors. Sun, moon, planets, stars, nebulae, galaxies and evolution. Laboratory exercises include use of photographic material, computer simulations, and standard laboratory equipment.

Discussion sections and lab sections do not meet the first week of classes. Attend lecture before coming to discussion or lab sections. Students must pay a \$50.00 Laboratory Materials fee.

0101	Eliza Kempton	Seats (Total: 20)		
	TuTh 11:00am - 12:15pm	PHY 1412		
	Tu 5:30pm - 7:30pm	ATL 0254	Lab	
	Tu 3:30pm - 4:20pm	ATL 2400	Discussion	
0102	Eliza Kempton	Seats (Total: 20)		
	TuTh 11:00am - 12:15pm	PHY 1412		
	W 8:30am - 10:30am	ATL 0254	Lab	
	Tu 3:30pm - 4:20pm	ATL 2400	Discussion	
0103	Eliza Kempton	Seats (Total: 20)		
	TuTh 11:00am - 12:15pm	PHY 1412		
	W 11:00am - 1:00pm	ATL 0254	Lab	
	W 10:00am - 10:50am	ATL 2400	Discussion	
0104	Eliza Kempton	Seats (Total: 20)		
	TuTh 11:00am - 12:15pm	PHY 1412		
	Th 3:30pm - 5:30pm	ATL 0254	Lab	
	W 10:00am - 10:50am	ATL 2400	Discussion	
0105	Eliza Kempton	Seats (Total: 20)		
	TuTh 11:00am - 12:15pm	PHY 1412		
	W 1:00pm - 3:00pm	ATL 0254	Lab	
	W 11:00am - 11:50am	ATL 2400	Discussion	
0106	Eliza Kempton	Seats (Total: 20)		
	TuTh 11:00am - 12:15pm	PHY 1412		
	Th 8:30am - 10:30am	ATL 0254	Lab	
	W 11:00am - 11:50am	ATL 2400	Discussion	
0107	Eliza Kempton	Seats (Total: 20)		
	TuTh 11:00am - 12:15pm	PHY 1412		
	W 6:00pm - 8:00pm	ATL 0254	Lab	
	W 12:00pm - 12:50pm	ATL 2400	Discussion	
0108	Eliza Kempton	Seats (Total: 20)		
	TuTh 11:00am - 12:15pm	PHY 1412		
	Th 6:00pm - 8:00pm	ATL 0254	Lab	
	W 12:00pm - 12:50pm	ATL 2400	Discussion	

0109	Eliza Kempton	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm	PHY 1412	
	F 9:00am - 11:00am	ATL 0254	Lab
	W 1:00pm - 1:50pm	ATL 2400	Discussion
0110	Eliza Kempton	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm	PHY 1412	
	F 12:00pm - 2:00pm	ATL 0254	Lab
	W 1:00pm - 1:50pm	ATL 2400	Discussion
FC01	James Hunt	Seats (Total: 15)	
	TuTh 6:00pm - 7:15pm	ATL 2400	
	M 6:00pm - 8:00pm	ATL 0254	Lab
	F 1:00pm - 1:50pm	ATL 2400	Discussion
<i>Restricted to students in Freshmen Connection.</i>			

ASTR120 Introductory Astrophysics - Solar System

Credits: 3 Grading Method: Regular CORE: PS General Education: DSNS

Prerequisite: Must have completed or be concurrently enrolled in MATH140. Restriction: Must not have completed ASTR101 or ASTR100. Credit only granted for: ASTR100, ASTR101, or ASTR120.

For students majoring in astronomy or with a strong interest in science. Topics include development of astronomy, planetary orbits, electromagnetic radiation, telescopes as well as constituents and origin of the solar system (planets, satellites, comets, asteroids, meteoroids, etc.).

0101	Stuart Vogel	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm	ATL 2400	
	F 1:00pm - 1:50pm	ATL 2428	Discussion
0102	Stuart Vogel	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm	ATL 2400	
	F 2:00pm - 2:50pm	ATL 2428	Discussion

ASTR220 Collisions in Space - The Threat of Asteroid Impacts

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSNS, SCIS

Restriction: Must not be in Astronomy program. Additional information: Course is open to Astronomy and Planetary Sciences minors.

Appropriate for non-science majors. Worried? Can't sleep? Collisions in Space will evaluate the threat of asteroid impacts with the Earth using knowledge of asteroid characteristics and orbits. The merits of possible defense plans will be discussed, as well as the budgetary and political concerns associated with implementing any such plan.

0101	Jessica Sunshine	Seats (Total: 30)	
	TuTh 2:00pm - 3:15pm	ESJ 2208	
	W 12:00pm - 12:50pm	ATL 1114	Discussion
0102	Jessica Sunshine	Seats (Total: 30)	
	TuTh 2:00pm - 3:15pm	ESJ 2208	
	W 1:00pm - 1:50pm	ATL 1114	Discussion

ASTR230 The Science and Fiction of Planetary Systems

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSNS, SCIS

Prerequisite: Must have math eligibility of MATH115 or higher; or MATH113.

Have you ever wondered if humans will ever terraform Mars or Europa so we could live there without a spacesuit? Has it ever crossed your mind how lucky you are that you live on a water-rich planet with an oxygen-rich atmosphere? Have you ever suspected novelists and scriptwriters of creating ridiculous planets that violate scientific laws? Does the fate of our planet's thin biosphere keep you up at night? How common is life in the Universe? These are difficult questions, but armed with the right information, you can answer all of them. The Science and Fiction of Planetary Systems will help you develop a deeper understanding of why planets are the way they are. Along the way, you'll see examples of mistakes made in classic science fiction movies, novels and short stories and get the chance to invent your own plausible planets!

0101	Alan Peel	Seats (Total: 36)	
	W 9:00am - 9:50am	PHY 1410	
	MWF 12:00pm - 12:50pm	ESJ 2309	Discussion
0102	Alan Peel	Seats (Total: 36)	
	W 9:00am - 9:50am	PHY 1410	
	MWF 1:00pm - 1:50pm	ESJ 2309	Discussion
0103	Alan Peel	Seats (Total: 36)	
	W 9:00am - 9:50am	PHY 1410	
	MWF 2:00pm - 2:50pm	ESJ 2309	Discussion

ASTR288 Special Projects in Astronomy

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail

Independent study, short research projects, tutorial reading, and assisting with faculty research and teaching under special supervision.

A faculty sponsor must be found by the students prior to enrollment.

Contact department for information to register for this course.

ASTR288C

Special Projects in Astronomy; Astronomy Research Techniques

(Perm req)

Credits: 2

Grading Method: Regular,
Pass-Fail, Audit

Independent study, short research projects, tutorial reading, and assisting with faculty research and teaching under special supervision.

0101	James Harrington	Seats (Total: 10)
	M 3:30pm - 5:30pm	ATL 0224

ASTR288I

Special Projects in Astronomy; Introduction to the Astronomy Major

(Perm req)

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

Independent study, short research projects, tutorial reading, and assisting with faculty research and teaching under special supervision.

Prerequisite: permission of department.

0101	Andrew Harris, Melissa Hayes-Gehrke	Seats (Total: 20)
	M 4:00pm - 4:50pm	ATL 1114
0201	Andrew Harris, Melissa Hayes-Gehrke	Seats (Total: 20)
	Tu 4:00pm - 4:50pm	ATL 1106

ASTR300

Stars and Stellar Systems

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSNS

Prerequisite: ASTR100 or ASTR101; and completion of the CORE Distributive Studies requirement in Mathematics and Sciences or General Education Fundamental Studies requirement in Mathematics. Or permission of CMNS-Astronomy department.

Designed primarily for non-science majors. Study of stars-types, properties, evolution, and distribution in space; supernovae, pulsars, and black holes.

Prerequisite: ASTR100 or ASTR101; and completion of the CORE Distributive Studies requirement in Mathematics and Sciences or General Education Fundamental Studies requirement in Mathematics. Or permission of CMNS-Astronomy department.

Designed primarily for non-science majors. A study of our progression of knowledge about the universe. Topics include: early cosmological models, geocentric vs. heliocentric theory, curvature of space, Hubble's Law, Big Bang Theory, microwave background radiation, evolution of stars and galaxies, dark matter, active galaxies, quasars and the future of the universe.

0101	Alberto Bolatto	Seats (Total: 60)
	TuTh 12:30pm - 1:45pm	ATL 2400

ASTR380 Life in the Universe - Astrobiology

Credits: 3 Grading Method: Regular, General Education: DSNS
 Audit

Designed primarily for non-science majors. Study of the astronomical perspective on the conditions for the origin and existence of life in the universe.

0101	Suvi Gezari	Seats (Total: 60)
	TuTh 2:00pm - 3:15pm	ATL 2400

ASTR399 Honors Seminar

(Perm req)

Credits: 1-16 Grading Method: Regular,
 Pass-Fail, Audit

Credit according to work done.

Contact department for information to register for this course.

ASTR415 Computational Astrophysics

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Prerequisite: ASTR121; and (PHYS271 and PHYS270; or PHYS273). Or permission of CMNS-Astronomy department. Jointly offered with ASTR615. Credit only granted for: ASTR415 or ASTR615.

Introduction to the most important computational techniques being used in research in astrophysics. Topics include modern high performance computer architectures, scientific visualization and data analysis, and detailed descriptions of numerical algorithms for the solution to a wide range of mathematical systems important in astrophysics.

0101	Derek Richardson	Seats (Total: 10)
	TuTh 12:30pm - 1:45pm	ATL 0224

ASTR480 High Energy Astrophysics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in ASTR320; or permission of CMNS-Astronomy department.

The structure, formation, and astrophysics of compact objects, such as white dwarfs, neutron stars, and black holes, are examined. Phenomena such as supernovae and high-energy particles are also covered.

0101	Richard Mushotzky	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	ATL 1114

ASTR498 Special Problems in Astronomy

(Perm req)

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Research or special study. Credit according to work done.

Contact department for information to register for this course.

ASTR615 Computational Astrophysics

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of CMNS-Astronomy department. Jointly offered with ASTR415. Credit only granted for: ASTR415 and ASTR615.

Introduction to computational techniques used in astrophysical research. Topics include modern high performance computer architectures, scientific visualization and data analysis, and detailed descriptions of numerical algorithms for the solution to a wide range of mathematical systems important in astrophysics.

0101	Derek Richardson	Seats (Total: 10)
	TuTh 12:30pm - 1:45pm	ATL 0224

ASTR622 Cosmology

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of CMNS-Astronomy department. Credit only granted for: ASTR622 or ASTR688R. Formerly: ASTR688R.

Introduction to modern cosmology. Topics include the large scale structure of the universe, cosmological models, the Big Bang, the cosmic microwave background, the nature of dark matter, and galaxy formation.

0101	Massimo Ricotti	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ATL 0201

ASTR688B Special Topics in Modern Astronomy; Current Astronomy Research

(Perm req)

Credits: 1-3 Grading Method: Regular

Special topics such as extragalactic radio sources, plasma astrophysics, the H.R. diagram, chemistry of the interstellar medium, radiophysics of the sun.

0101	Instructor: TBA	Seats (Total: 30)
	W 3:30pm - 5:30pm	ATL 2400

ASTR699 Special Problems in Advanced Astronomy

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ASTR799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ASTR898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ASTR899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

The College of Computer, Mathematical and Natural Sciences enforces course prerequisites. Students who do not meet the course prerequisites will be administratively dropped from the course. Registration in course sections which begin with "SEF*" are restricted to Post-Baccalaureate students who enroll through the Science in the Evening Program in the College of Computer, Mathematical and Natural Sciences. Please note that this class is charged at the regular part-time tuition rate (on a per credit basis), even for full-time students. To register or to learn more about the Science in the Evening program, you must contact the Life Sciences Outreach and Special Programs Office at (301) 405-6892.

BCHM461 Biochemistry I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM271 and CHEM272; or minimum grade of C- in CHEM276 and CHEM277. Credit only granted for: BCHM461 or BCHM463.

First semester of a comprehensive introduction to modern biochemistry. Structure, chemical properties, and function of proteins and enzymes, carbohydrates, lipids, and nucleic acids. Basic enzyme kinetics and catalytic mechanisms.

0101	Paul Paukstelis TuTh 9:30am - 10:45am	Seats (Total: 125) CHM 1402
0102	David Fushman MW 4:00pm - 5:15pm	Seats (Total: 125) CHM 1402
0103	Nicole LaRonde TuTh 12:30pm - 1:45pm	Seats (Total: 125) CHM 1402

BCHM462 Biochemistry II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BCHM461. Credit only granted for: BCHM462 or BCHM463.

A continuation of BCHM 461. Metabolic pathways and metabolic regulation, energy transduction in biological systems, enzyme catalytic mechanisms.

0102	Douglas Julin MWF 11:00am - 11:50am	Seats (Total: 100) CHM 1402
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BCHM463 Biochemistry of Physiology

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Minimum grade of C- in CHEM271 and CHEM272; or minimum grade of C- in CHEM276 and CHEM277. Credit only granted for: BCHM461, BCHM462 or BCHM463.

A one-semester introduction to general biochemistry. A study of protein structure, enzyme catalysis, metabolism, and metabolic regulation with respect to their relationship to physiology.

0101	Christiana Guest TuTh 11:00am - 12:15pm	Seats (Total: 125) CHM 1402
0103	Bonnie Dixon MWF 12:00pm - 12:50pm	Seats (Total: 125) CHM 1402
SEF1	Bonnie Dixon M 6:30pm - 9:30pm	Seats (Total: 40) CHM 2201 <i>Restricted to students in the SIE Program. Click here for more information.</i>
SG91	Misook Uh MW 9:30am - 10:45am	Seats (Total: 40) BLD2 2062 <i>Registration is restricted to Biological Sciences-Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci@umd.edu for permission.</i>

BCHM464

Biochemistry Laboratory

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BCHM461 or BCHM463; and a grade of C- or better in the prerequisite is required for all College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: BCHM465. Restriction: BCHM, CHEM, and Nutritional Sciences majors have first priority, followed by other life science majors.

Biochemical and genetic methods for studying protein function. Site-directed mutagenesis and molecular cloning, protein purification, enzyme activity assays, computer modeling of protein structure.

Students must pay a \$40.00 laboratory materials fee.

0101	Christopher Capp Tu 12:30pm - 1:20pm Th 12:30pm - 5:30pm	Seats (Total: 18) ESJ 2309 ESJ 0316 Lab
0102	Christopher Capp Tu 12:30pm - 1:20pm W 12:00pm - 5:00pm	Seats (Total: 18) ESJ 2309 ESJ 0316 Lab

BCHM465 Biochemistry III

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: CS

Prerequisite: BCHM461 or BCHM463; and a grade of C- or better in the prerequisite is required for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Recommended: BCHM462.

CORE Capstone (CS) Course. An advanced course in biochemistry. Biochemical approach to cellular information processing. DNA and RNA structure. DNA replication, transcription, and repair. Translation of mRNA to make proteins.

0101	Theodore Dayie	Seats (Total: 80)
	TuTh 8:00am - 9:15am	CHM 1402

BCHM661 Nucleic Acids I

Credits: 2 Grading Method: Regular,
Audit

Prerequisite: BSCI410 and BCHM465.

Topics covered: Chemistry and structure of DNA and RNA, from nucleotides to chromatin, chromosomes, and genomes, and some methods for studying, synthesizing, sequencing and manipulating nucleic acids. Rudimentary genomics and bioinformatics. DNA Biology: selected aspects of the biochemistry and regulation of DNA replication, repair, and recombination, and how these processes interact with each other.

0101	Jason Kahn	Seats (Total: 30)
	Meets August 26, 2019 - October 11, 2019	
	MWF 9:30am - 10:50am	BSB 2118

BCHM662 Nucleic Acids II

Credits: 2 Grading Method: Regular,
Audit

Prerequisite: BCHM661.

Topics covered: Interactions between nucleic acids and ligands such as cations, drugs, and especially proteins. Sources of binding affinity and specificity. Selection-amplification methods. Description of several classes of protein-nucleic acids complexes. DNA/RNA catalysis, the origin of life, mobile genetic elements.

0101	Jason Kahn	Seats (Total: 30)
	Meets October 14, 2019 - December 9, 2019	
	MWF 9:30am - 10:50am	BSB 2118

BCHM669A Special Topics in Biochemistry; Methods for Structural Determination in Solution

Credits: 1-3 Grading Method: Regular,
Audit

0101	Instructor: TBA	Seats (Total: 10)
	MW 11:00am - 12:15pm	BMS 2118

BCHM669C Special Topics in Biochemistry; Protein Folding and Disease

Credits: 3 Grading Method: Regular,
Audit

0101	John Orban	Seats (Total: 10)
	Meets August 26, 2019 - October 11, 2019	
	TuTh 2:00pm - 4:40pm	PLS 1125

BCHM669D Special Topics in Biochemistry; Drug Discovery

Credits: 3 Grading Method: Regular,
Audit

0101	Osnat Herzberg	Seats (Total: 10)
	Meets October 14, 2019 - December 9, 2019	
	TuTh 2:00pm - 4:40pm	PLS 1125

BCHM669F Special Topics in Biochemistry; Hands-on Molecular Biophysics

Credits: 3 Grading Method: Regular,
Audit

0101	Dorothy Beckett	Seats (Total: 10)
	M 11:00am - 11:50am	CHM 4507
	M 1:00pm - 3:50pm	CHM 3517 Lab
	F 12:00pm - 2:50pm	CHM 3517 Lab

BCHM671

Credits: 3

Prerequisite: BCHM461; or students who have taken courses with comparable content may contact the department.

Principles of protein structure, folding, and function, experimental characterization of structure, active sites, enzyme mechanisms and kinetics.

0101	Jinwoo Lee	Seats (Total: 35)
	TuTh 9:30am - 10:50am	BSB 2118

BCHM698

Credits: 2

Students will prepare and present a departmental seminar based on a topic in the current biochemical research literature.

0101	Douglas Julin	Seats (Total: 10)
	Contact instructor or department for details.	

BCHM699

Credits: 1-6

Laboratory experience in a research environment. Restricted to students in the non-thesis M.S. option.

Open only to non-thesis M.S. degree candidates.

Contact department for information to register for this course.

BCHM799

Credits: 1-6

Contact department for information to register for this course.

BCHM889A

Credits: 1

0101	Theodore Dayie	Seats (Total: 40)
	Tu 11:00am - 11:50am	CHM 0112

BCHM889C**Seminar; Allostery in DNA Binding**

(Perm req)

Credits: 1

Grading Method: Regular,
Audit

0101	Instructor: TBA	Seats (Total: 10)
Contact instructor or department for details.		

BCHM889D**Seminar; Enzymology Recombination**

(Perm req)

Credits: 1

Grading Method: Regular,
Audit

0101	Instructor: TBA	Seats (Total: 10)
Contact instructor or department for details.		

BCHM889F**Seminar; Antimicrobial Peptides**

(Perm req)

Credits: 1

Grading Method: Regular,
Audit

0101	Instructor: TBA	Seats (Total: 10)
Contact instructor or department for details.		

BCHM889J**Seminar; Nucleic Acid Structures**

(Perm req)

Credits: 1

Grading Method: Regular,
Audit

0101	Instructor: TBA	Seats (Total: 10)
Contact instructor or department for details.		

BCHM889M**Seminar; Modern Methods in NMR and Structural Biology**

Credits: 1-3

Grading Method: Regular,
Audit

0101	Instructor: TBA	Seats (Total: 40)
Contact instructor or department for details.		

BCHM889P**Seminar; Structure and Reactivity of Biopolymers**

(Perm req)

Credits: 1

Grading Method: Regular,
Audit

0101	Instructor: TBA	Seats (Total: 10)
Contact instructor or department for details.		

BCHM898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular
Contact department for information to register for this course.

BCHM899 Doctoral Dissertation Research

(Perm req) Credits: 6 Grading Method: Regular
Contact department for information to register for this course.

BEES Behavior, Ecology, Evolution and Systematics **Fall 2019**

BEES608A Seminar in Behavior, Ecology, Evolution and Systematics; Introduction to BEES: Behavior, Ecology, Evolution, and Systematics

Credits: 1 Grading Method: Regular

One seminar per week for each subject selected: Behavior; Ecology; Evolution; Systematics; Behavior, Ecology, Evolution and Systematics.

Restricted to BISI program students.

0101	Eric Haag	Seats (Total: 20)
	W 6:00pm - 8:00pm	BPS 1208

BEES799 Master's Thesis Research

(Perm req) Credits: 1-6 Grading Method: Regular
Contact department for information to register for this course.

BEES898 Pre-Candidacy Research

(Perm req) Credits: 1-8 Grading Method: Regular
Contact department for information to register for this course.

BEES899 Doctoral Dissertation Research

(Perm req) Credits: 6 Grading Method: Regular
Contact department for information to register for this course.

BIOE120**Biology for Engineers**

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in MATH140. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Introduction to the functions and interactions of biological systems from a quantitative perspective. Introduction to the modern experimental techniques and methods of data analysis. Roles for bioengineers in biology, and the role of biology in bioengineering will be elucidated.

Students will be introduced to the functions and interactions of biological systems from a quantitative perspective. They will also be encouraged to solve problems through active inquiry, critical analysis, and creativity. Finally, roles for bioengineers in biology, and the role of biology in bioengineering will be elucidated.

0101	Angela Jones	Seats (Total: 36)	
	MWF 1:00pm - 1:50pm	AJC 2134	
	F 11:00am - 11:50am	AJC 2119	Discussion
0201	Angela Jones	Seats (Total: 36)	
	MWF 12:00pm - 12:50pm	AJC 2134	
	Th 5:00pm - 5:50pm	AJC 2134	Discussion
0301	Angela Jones	Seats (Total: 42)	
	TuTh 9:30am - 10:45am	AJC 2132	
	F 3:00pm - 3:50pm	AJC 2121	Discussion

BIOE121**Biology for Engineers Laboratory**

(Perm req)

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in BIOE120. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Bioengineering encompasses numerous sub-disciplines that apply engineering principles to analyze biological systems and that utilize engineering design strategies to solve biological and biomedical problems. This course is aimed at providing students with the opportunity to learn how biology and engineering can synergistically contribute to our understanding of such problems, and to gain hands-on experience in basic techniques relevant to Bioengineering.

0101	Angela Jones M 4:00pm - 4:50pm W 9:00am - 11:00am	Seats (Total: 20) KEB 1110 AJC 1121 Lab
0102	Angela Jones M 4:00pm - 4:50pm W 2:00pm - 4:00pm	Seats (Total: 20) KEB 1110 AJC 1121 Lab
0103	Angela Jones M 4:00pm - 4:50pm Th 11:00am - 1:00pm	Seats (Total: 20) KEB 1110 AJC 1121 Lab
0104	Angela Jones M 4:00pm - 4:50pm Th 2:00pm - 4:00pm	Seats (Total: 20) KEB 1110 AJC 1121 Lab

BIOE221

(Perm req)

Academic and Career Planning

Credits: 1 Grading Method: Regular

Prerequisite: BIOE120 and BIOE121. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Provides practical tools to help Bioengineering majors think critically about their goals and career paths. Guides Bioengineering students through accessing useful resources both on- and off-campus.

0101	Bill Churma Tu 4:00pm - 4:50pm	Seats (Total: 30) AJC 2119
0201	Abby Shantzis Tu 4:00pm - 4:50pm	Seats (Total: 30) AJC 2134

BIOE232

(Perm req)

Bioengineering Thermodynamics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS261 and PHYS260. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE232, ENES232, ENME232, or ENME320.

A quantitative introduction to thermodynamic analysis of bioengineering systems. Bioengineering encompasses a wide range of applications from nanoscale interactions (e.g. reactions between molecules), to cellular interactions (e.g. membrane electrical currents), to overall balances on organisms, all the way to large scale manufacturing. Each of these applications (and many others not mentioned) involve energy interactions which is the domain of thermodynamics. The basic laws of thermodynamics will be introduced and explained through a series of examples related to bioengineering systems.

0101	Jose Aranda-Espinoza	Seats (Total: 35)	
	TuTh 9:30am - 10:45am	KEB 1200	
	F 1:00pm - 1:50pm	AJC 2132	Discussion
0102	Jose Aranda-Espinoza	Seats (Total: 35)	
	TuTh 9:30am - 10:45am	KEB 1200	
	F 2:00pm - 2:50pm	AJC 2132	Discussion

BIOE241

(Perm req)

Biocomputational Methods

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Application of computer technology to biological and natural resource systems considering engineering aspects. Designed to help students in the use of computer technology for problem solving. The course will cover 4-5 software packages important for later use by the student.

0101	Hubert Montas	Seats (Total: 30)	
	MWF 4:00pm - 4:50pm	KEB 2107	
0201	Hubert Montas	Seats (Total: 40)	
	MWF 5:00pm - 5:50pm	KEB 2111	

BIOE331

(Perm req)

Biofluids

Credits: 3

Grading Method: Regular

Prerequisite: MATH246, BIOE120, BIOE121, BIOE241, and BIOE371; and must have completed or be concurrently enrolled in BIOE232. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE331, ENCE305, or ENME331.

Principles and applications of fluid mechanics with a focus on bioengineering topics. Content includes conservation of mass, momentum, and energy, as well as the application of these fundamental relations to hydrostatics, control volume analysis, internal and external flow, and boundary layers. Applications to biological and bioengineering problems such as tissue engineering, bioprocessing, imaging, and drug delivery.

0101	Gregg Duncan	Seats (Total: 35)	
	TuTh 2:00pm - 3:15pm	EGR 0108	
	F 1:00pm - 2:50pm	AJC 2121	Discussion
0102	Gregg Duncan	Seats (Total: 35)	
	TuTh 2:00pm - 3:15pm	EGR 0108	
	F 3:00pm - 4:50pm	AJC 2132	Discussion

BIOE340 Modeling Physiological Systems and Lab

(Perm req)

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BSCI330, BIOE120, BIOE121, BIOE241, and MATH246. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE340 or (BSCI440 and BSCI441).

Topics covered will include cell and general physiology, membrane physiology, blood cells and clotting, circulation, metabolism, respiration, and the nervous system. A lab component will also be included.

0101	John Fisher	Seats (Total: 35)	
	TuTh 3:30pm - 4:45pm	KEB 1200	
	Th 5:00pm - 6:30pm	KEB 2111	Lab
	Tu 5:00pm - 5:50pm	ATL 2400	Discussion
	<i>Lab will meet in either KEB2107 or KEB2111.</i>		
0102	John Fisher	Seats (Total: 30)	
	TuTh 3:30pm - 4:45pm	KEB 1200	
	Th 5:00pm - 6:30pm	KEB 2107	Lab
	W 9:00am - 9:50am	AJC 2132	Discussion

BIOE371 Linear Systems and Ordinary Differential Equations for Bioengineering Applications

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BIOE241; and must have completed or be concurrently enrolled in MATH246. Restriction: Permission on ENGR-Fischell Department of Bioengineering department.

This class utilizes fundamentals in linear systems, including eigenvalues and eigenvectors, as well as linear differential equations, to study various problems in bioengineering and biological systems, with a particular emphasis on feedback, stability, controllability, and control design.

0101	Lan Ma	Seats (Total: 80)
	MWF 11:00am - 11:50am	JMP 3201

BIOE372 Biostatistics for Experimental Design and Data Analysis

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: BIOE120, BIOE121, and BIOE241. Recommended: MATH246. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE372 or STAT464.

This course will instruct students in the fundamentals of probability and statistics through examples in biological phenomenon, the design of bioengineering experiments, and clinical data analysis. Fundamentals covered in the course include probability distributions, hypothesis testing, power analysis, regression analysis, and correlation analysis.

0101	Giuliano Scarcelli	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	CCC 1100
	F 10:00am - 10:50am	AJC 2119 Discussion
0102	Giuliano Scarcelli	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	CCC 1100
	W 5:00pm - 5:50pm	AJC 2121 Discussion

BIOE399 Independent Study in Bioengineering

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Independent study.

Prerequisite: permission of department.

Contact department for information to register for this course.

BIOE399H Independent Study in Bioengineering

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Independent study.

Contact department for information to register for this course.

BIOE404**Biomechanics**

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH246, BIOE120, ENES102, BIOE121, and BIOE241; and must have completed or be concurrently enrolled in BIOE371. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Introduction to the fundamentals of biomechanics including force analysis, mechanics of deformable bodies, stress and strain, multiaxial deformations, stress analysis, and viscoelasticity. Biomechanics of soft and hard tissues.

0101	Kimberly Stroka	Seats (Total: 35)	
	TuTh 11:00am - 12:15pm	KEB 1200	
	M 9:00am - 9:50am	AJC 2121	Discussion
0102	Kimberly Stroka	Seats (Total: 35)	
	TuTh 11:00am - 12:15pm	KEB 1200	
	W 4:00pm - 4:50pm	AJC 2121	Discussion

BIOE431**Fundamentals of Biosensor Techniques, Instrumentation, and Applications**

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHEM135, PHYS260, PHYS261, BSCI330, BIOE120, BIOE121, BIOE241, and MATH246; or permission of ENGR-Fischell Department of Bioengineering department. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

A thorough review of fundamental concepts of biosensing systems, principles of common detection methods, and modern applications of biosensors. Primarily literature driven. Students will obtain a detailed understanding of cutting-edge biosensing techniques, the instrumentation used, and the application space. Students also will develop skills in using current literature as a source of knowledge.

0101	Ian White	Seats (Total: 35)	
	TuTh 2:00pm - 3:15pm	ESJ 2212	

BIOE437**Computer-Aided Design in Bioengineering**

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: BIOE120, BIOE121, BIOE241, and MATH246; or permission of ENGR-Fischell Department of Bioengineering department. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE437, BIOE689V, ENME414, ENME272, or ENAE488D. Formerly: BIOE689V.

Introduction to Computer-Aided Design (CAD). Basic CAD operations will be demonstrated in class with Creo Parametric (formerly Pro/E). Lecture topics will summarize design methodology, review best-practices in hardware development, and discuss engineering applications. The course will culminate in a student-selected project leveraging CAD.

0101	Alvin Yew	Seats (Total: 40)
	Tu 5:00pm - 7:45pm	KEB 2111

BIOE442 **Python: Introduction to Programming and Data Analysis**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BIOE241, BIOE120, BIOE121, and MATH241; or permission of ENGR-Fischell Department of Bioengineering department. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE489A or BIOE442. Formerly: BIOE489A.

Provides an introduction to structured programming, computational methods, and data analysis techniques with the goal of building a foundation allowing students to confidently address problems in research and industry. Fundamentals of programming, algorithms, and simulation are covered from a general computer science perspective, while the applied data analysis and visualization portion makes use of the Python SciPy stack.

0101	Eric Bubar	Seats (Total: 30)
	M 5:00pm - 7:45pm	KEB 2107

BIOE453 **Biomaterials**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHEM231, MATH246, CHEM232, BIOE120, BIOE121, and BIOE241. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE453, CHBE457, or ENMA425.

Examination of the structure and function of natural biomaterials, and cell-extracellular matrix interactions. Study physical properties of synthetic biomaterials for biomedical applications. Understanding molecular level interactions between biomolecules and biomaterials to design novel biomaterials with desirable characteristics. Application of biomaterials as implants, drug delivery systems, biosensors, engineered materials such as artificial skin and bone growth scaffolds will be covered.

0101	Christopher Jewell	Seats (Total: 30)	
	MWF 12:00pm - 12:50pm	KEB 1200	
	M 11:00am - 11:50am	AJC 2119	Discussion
0102	Christopher Jewell	Seats (Total: 30)	
	MWF 12:00pm - 12:50pm	KEB 1200	
	M 1:00pm - 1:50pm	KEB 1200	Discussion

BIOE457

Biomedical Electronics & Instrumentation

(Perm req)

Credits: 4

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BIOE120, BIOE121, BIOE241, PHYS261, MATH246, and PHYS260. Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

Students learn fundamental concepts of electronics, assembly of electronic components into functional circuits, and integration of functional electronic devices and circuits into a system. In the lab component, students will learn to assemble and evaluate circuits and systems.

0101	Yang Tao	Seats (Total: 30)	
	MWF 10:00am - 10:50am	CCC 1205	
	Tu 9:00am - 10:50am	AJC 1121	Lab
0102	Yang Tao	Seats (Total: 30)	
	MWF 10:00am - 10:50am	CCC 1205	
	F 11:00am - 12:50pm	AJC 1121	Lab

BIOE462

Therapeutic Development and Delivery

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BIOE120, BIOE121, BIOE241, MATH246, and BSCI330; and must have completed or be concurrently enrolled in BIOE340. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE489P or BIOE462. Formerly: BIOE489P.

The ultimate purpose of the pharmaceutical and biotechnology industries is the development and delivery of therapeutics. This course covers fundamentals of engineering and the pharmaceutical sciences related to therapeutics, including basic pharmaceuticals/drug delivery, pharmacokinetics, biomolecular kinetics, and regulatory issues. Specific focus is placed on biotherapeutics, including antibodies and protein engineering, RNA and DNA therapeutics (gene therapy and RNAi), extracellular vesicle biotechnology (exosomes), and cell-based therapies, including stem cells. The use of delivery technologies to enable therapeutics (e.g. nanomedicine) will also be discussed.

0101	Steven Jay	Seats (Total: 36)
	TuTh 11:00am - 12:15pm	AJC 2119

BIOE464 Introduction to Computational Molecular Bioengineering

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BIOE120, BIOE241, MATH246, BIOE232, and BIOE372; or permission of ENGR-Fischell Department of Bioengineering department. Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE489N or BIOE464. Formerly: BIOE489N.

Designed to introduce students to the principles, methods, and software used for simulation and modeling of macromolecules of biological interest such as proteins, lipids, and polysaccharides. Along with experiment and theory, computational modeling provides new tools for analysis, explanation and prediction. The course is also useful for students who plan to use experimental techniques as their primary approach, but who will employ computational modeling as a tool to obtain integrative understanding of complex systems. Finally, the course should be valuable as an introductory overview for students planning to conduct their thesis research in computational modeling of biological systems. Class topics: Basic statistical thermodynamics, Force fields, Molecular dynamics/ monte carlo methods, Conformational analysis, Fluctuations & transport properties, Free-energy calculations, Multiscale modeling.

0101	Silvina Matysiak	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ATL 1410

BIOE485 Capstone Design I: Entrepreneurship, Regulatory Issues, and Ethics

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 21 credits in BIOE courses. Restriction: Permission of ENGR-Fischell Department of Bioengineering department; and senior standing; and must be in Engineering: Bioengineering program. Credit only granted for: BIOE485 or ENBE485. Formerly: ENBE485.

This is the first part of a two-semester senior capstone design course which covers principles involved in engineering design, design approaches, economics of design, ethics in engineering, and patent regulations. It also helps students learn team work and write design project proposals under the mentorship of a faculty advisor.

*A Fearless Ideas Course from the Academy for Innovation & Entrepreneurship (AIE):
<http://ter.ps/iamFEARLESS> Click here for more information on the Fearless Ideas Courses.*

0101	Yang Tao	Seats (Total: 130)
	MW 2:00pm - 3:15pm	EGR 1202

BIOE489C**Special Topics in Bioengineering; Mechanical Design of Medical Devices**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Prerequisite: BIOE120, BIOE121, BIOE241, BIOE437. Restriction: Permission of department.

0101	Frank Modica	Seats (Total: 20)
	W 6:00pm - 9:00pm	KEB 2111

BIOE489H**Special Topics in Bioengineering; Bioengineering Honors Seminar**

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Restricted to students in the BIOE Honors Program.

0101	Kimberly Stroka	Seats (Total: 40)
	M 3:15pm - 4:15pm	EGR 3106

BIOE489R**Special Topics in Bioengineering; Protein Engineering**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Prerequisite: BIOE120 and BIOE232. Credit only granted for: CHBE497, BIOE489R, or ENCH648P.

0101	Amy Karlsson	Seats (Total: 6)
	TuTh 12:30pm - 1:45pm	EGR 1104

BIOE489W**Special Topics in Bioengineering; Advanced Biomaterials**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Exploring a variety of topics with Bioengineering.

Prereq: BIOE453 or Permission of the Fischell Department of Bioengineering.

0101	Xiaoming He	Seats (Total: 14)
	MW 12:30pm - 1:45pm	CHE 2145

BIOE601 Biomolecular and Cellular Rate Processes

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE601 or ENCH859B.

Presentation of techniques for characterizing and manipulating non-linear biochemical reaction networks. Advanced topics to include mathematical modeling of the dynamics of biological systems; separation techniques for heat sensitive biologically active materials; and rate processes in cellular and biomolecular systems. Methods are applied to current biotechnological systems, some include: recombinant bacteria; plant insect and mammalian cells; and transformed cell lines.

0101	William Bentley	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	AJC 2121

BIOE604 Cellular and Physiological Transport Phenomena

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ENGR-Fischell Department of Bioengineering department.

A study of transport processes, including momentum, energy and mass transport, relevant to biosystems at various scales from physiological to cellular systems. Transport leads to sets of partial differential equations and the course revolves around approaches to solving these equations to arrive at fundamental understanding of the physics of transport in biosystems.

BI01	Keith Herold	Seats (Total: 30)
	Class time/details on ELMs	ONLINE
<i>This section is restricted to ENPM students only.</i>		

BIOE605 BIOE Graduate Studies I

(Perm req)

Credits: 1 Grading Method: Regular

Restriction: Must be in ENGR: PhD Only-Bioengineering (Doctoral) program.

Introduction to the bioengineering graduate program. Students gain exposure to departmental research through lab rotation and to current research in the field through seminar. Students will also gain preparation and guidance on other first-year academic requirements.

0101	Jose Aranda-Espinoza	Seats (Total: 30)
	F 10:00am - 10:50am	AJC 2121
	F 9:00am - 9:50am	AJC 2121 Discussion

BIOE608 Bioengineering Seminar Series

(Perm req)

Credits: 1 Grading Method: Regular,
Audit*A variety of topics related to Bioengineering will be presented in weekly seminars.*

For BIOE majors only.

0101	Kimberly Stroka	Seats (Total: 40)
	F 9:00am - 9:50am	AJC 2132

BIOE612 Physiological Evaluation of Bioengineering Designs

(Perm req)

Credits: 3 Grading Method: Regular,
Audit*Restriction: Permission of ENGR-Fischell Department of Bioengineering department.**Bioengineering designs of biomaterials, biomedical devices, imaging and drug delivery agents, tissue engineering, prosthesis (among others), offer the opportunity to improve health care. This course is aimed at providing knowledge to lead bioengineering designs on the basis of biocompatibility and to provide tools to assess their patho-physiological impact in biological systems.*

0101	Huang Chiao Huang	Seats (Total: 42)
	TuTh 11:00am - 12:15pm	AJC 2132

BIOE631 Biosensor Techniques, Instrumentation, and Applications

(Perm req)

Credits: 3 Grading Method: Regular,
Audit*Prerequisite: Permission of ENGR-Fischell Department of Bioengineering department. Credit only granted for: BIOE631, BIOE689Z, or CHPH718Z. Formerly: BIOE689Z.**A thorough review of fundamental concepts of biosensing systems, principles of common detection methods, and modern applications of biosensors. Primarily literature driven. Students will obtain a detailed understanding of cutting-edge biosensing techniques, the instrumentation used, and the application space. Students also will develop skills in using current literature as a source of knowledge.*

0101	Ian White	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	ESJ 2212

BIOE658D Special Topics in Bioengineering (M.Eng.); Applications of Biomaterials

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Special topics in Bioengineering.

For Master of Engineering students only or with permission of department. Credit will only be granted for BIOE689D or BIOE658D. The primary objective/goal of this course is to provide the tools and foundation necessary for cutting edge biomaterials research and translation into medical device applications. The first half of the course will focus on the fundamentals of materials while the second half of the course will focus on the pertinent biological interactions which critically impact the design and development of biomaterials for clinical use.

0101	Katherine Joyner	Seats (Total: 15)
	Th 6:00pm - 8:45pm	AJC 2121
BI01	Katherine Joyner	Seats (Total: 15)
	Class time/details on ELMs	ONLINE

BIOE658G

Special Topics in Bioengineering (M.Eng.); Genome Editing & Synthetic Biology

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Special topics in Bioengineering.

For Master of Engineering students only or with permission of department. The course will introduce students to the field of genome editing and synthetic biology. After reviewing basic molecular biology concepts necessary to engage with the material, the course will explore the relevant cutting edge technologies via in-depth analysis of scientific papers, both historically important and recent landmark reports.

BI01	Jarred Callura	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

BIOE658N

Special Topics in Bioengineering (M.Eng.); Advanced Experiences in Bioengineering

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Special topics in Bioengineering.

For Master of Engineering students only or with permission of department. Students that have already identified professional contacts that will support them during this experiential co-op opportunity will need to apply for this course directly through the instructor.

0101	Angela Jones	Seats (Total: 2)
	Contact instructor or department for details.	

BIOE658R Special Topics in Bioengineering (M.Eng.); Regulatory Affairs in Medical Product Development

(Perm req)

Credits: 3 Grading Method: Regular,
 Audit

Special topics in Bioengineering.

For Master of Engineering students only or with permission of department. Credit will only be granted for ANTH627 or BIOE658R. An introductory course on regulations associated with the development and production of medical devices and pharmaceuticals

0101	Robert Bienvenu	Seats (Total: 15)
	Tu 6:00pm - 8:45pm	AJC 2134

BIOE689 Special Topics in Bioengineering

Credits: 1-3 Grading Method: Regular

Research Oriented Individual Instruction course.

Contact department for information to register for this course.

BIOE689T Special Topics in Bioengineering; Advanced Biomaterials

(Perm req)

Credits: 3 Grading Method: Regular

Research Oriented Individual Instruction course.

Restriction: Permission of the Fischell Department of Bioengineering. Instruction on advanced applications of various biomaterials and on mathematical/numerical modeling of biomaterials properties and processes (e.g., cellular uptake of nanoparticles, cell migration on biomaterials surface, and protein adsorption) using ordinary and partial differential equations.

0101	Xiaoming He	Seats (Total: 14)
	MW 12:30pm - 1:45pm	CHE 2145

BIOE689U Special Topics in Bioengineering; Computational Molecular Bioengineering

(Perm req)

Credits: 3 Grading Method: Regular

Research Oriented Individual Instruction course.

0101	Silvina Matysiak	Seats (Total: 10)
	TuTh 9:30am - 10:45am	ATL 1410

BIOE799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular, Sat-Fail
Contact department for information to register for this course.

BIOE898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular, Sat-Fail
Contact department for information to register for this course.

BIOE899 Doctoral Dissertation Research

(Perm req) Credits: 6 Grading Method: Regular, Sat-Fail
Contact department for information to register for this course.

BIOL Biology Fall 2019

BIOL608K Biology Seminar; Biological Sciences Teaching and Learning in Higher Education

(Perm req) Credits: 2 Grading Method: Regular

Cross-listed with CBMG699K, CHEM608K, and ENTM699K. Credit will be granted for only one of the following: BIOL608K, CBMG699K, CHEM608K, or ENTM699K.

0101	Gili Ad-Marbach	Seats (Total: 12)
	W 11:00am - 12:40pm	BPS 1208

BIOL608X Biology Seminar; Plant Functional Ecology and Evolution

Credits: 1 Grading Method: Regular

0101	Nathan Swenson	Seats (Total: 10)
	M 10:00am - 11:00am	BPS 2249

BIOL609 Special Problems in Biology

Credits: 1-6 Grading Method: Regular

One seminar per week for each subject selected: A-Cell Biology; B-Developmental Biology; C-Estuarine and Marine Biology; D-Genetics; E-Parasitology; F-Physiology; G-Systematics and Evolutionary Biology; I-Behavior; J-General; K-Endocrinology; L-Ecology.

Contact department for information to register for this course.

BIOL667 Mathematical Biology

Credits: 4 Grading Method: Regular

Credit only granted for: BIOL667 or ZOOL625. Formerly: ZOOL625.

Mathematical methods of analyzing deterministic and stochastic biological processes from a variety of areas (including population and evolutionary biology, neurobiology, physiology, and morphogenesis). Qualitative aspects of dynamical systems which are usually given as difference or differential equations. The computer program Mathematica will be used to obtain the numerical solutions of these equations.

0101	Jonathan Simon	Seats (Total: 5)	
	TuTh 9:30am - 10:45am	CCC 1105	
	M 1:00pm - 3:50pm	CCC 1111	Lab

BIOL671 Molecular Evolution

Credits: 3 Grading Method: Regular

Credit only granted for: BIOL671 or ZOOL645. Formerly: ZOOL645.

Basic foundations through advanced concepts in molecular evolution, including patterns and processes of DNA sequence variation, transposable element dynamics, gene duplication and loss, and genome organization. Relevant concepts from genetics, biochemistry, and phylogenetics also will be covered.

0101	Michael Cummings	Seats (Total: 15)	
	Class time/details on ELMs	ONLINE	

BIOL704 Cell Biology from a Biophysical Perspective

Credits: 3 Grading Method: Regular

Recommended: BSCI330, PHYS121, and PHYS122. Jointly offered with BSCI40 4. Credit only granted for: BSCI404, BIOL704, BIOL708O, or BIPH704. Formerly: BIOL708O.

An approach to cell biology by focusing on mechanisms and unifying paradigms. It will not assume a great deal of factual biological knowledge, but will expect a background that prepares students to think quantitatively and mechanistically.

0101	Sergei Sukharev	Seats (Total: 9)	
	TuTh 3:30pm - 4:45pm	PLS 1113	

BIOL708B Advanced Topics in Biology; Animal Behavior

Credits: 3 Grading Method: Regular

Lectures, experimental courses and other special instructions in various zoological subjects.

0101	Gerald Borgia	Seats (Total: 1)	
	MW 11:00am - 11:50am	PLS 1130	
	F 9:00am - 9:50am	PLS 1162	Discussion
0102	Gerald Borgia	Seats (Total: 1)	
	MW 11:00am - 11:50am	PLS 1130	
	F 10:00am - 10:50am	PLS 1162	Discussion
0103	Gerald Borgia	Seats (Total: 1)	
	MW 11:00am - 11:50am	PLS 1130	
	F 11:00am - 11:50am	PLS 1162	Discussion

BIOL708E Advanced Topics in Biology; Diseases of the Nervous System

Credits: 3 Grading Method: Regular

Lectures, experimental courses and other special instructions in various zoological subjects.

0101	Quentin Gaudry	Seats (Total: 8)	
	TuTh 12:30pm - 1:45pm	BPS 1236	

BIOL708Q Advanced Topics in Biology; Biology of Chemosensory Systems

Credits: 3 Grading Method: Regular

Lectures, experimental courses and other special instructions in various zoological subjects.

0101	Ricardo Araneda	Seats (Total: 10)	
	MW 2:00pm - 3:15pm	BPS 1230	

BIOL708X Advanced Topics in Biology; Sexual Selection in Nature

Credits: 3 Grading Method: Regular

Lectures, experimental courses and other special instructions in various zoological subjects.

0101	Heidi Fisher	Seats (Total: 7)	
	TuTh 3:30pm - 4:45pm	BPS 1228	

BIOL709C Selected Advanced Topics in Biology; Population and Evolutionary Genetics

Credits: 3 Grading Method: Regular,
Audit

Lectures, experimental courses and other special instructions in various biological subjects.

0101	Philip Johnson	Seats (Total: 4)	
	MW 11:00am - 11:50am	HBK 0123	
	F 10:00am - 11:50am	PLS 1121	Lab

BIOL709W Selected Advanced Topics in Biology; Molecular Neuroethology

Credits: 3 Grading Method: Regular,
Audit

Lectures, experimental courses and other special instructions in various biological subjects.

0101	Scott Juntti	Seats (Total: 10)	
	TuTh 3:30pm - 4:45pm	BPS 0283	

BIOL799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

BIOL898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

BIOL899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

BIOM Biometrics Fall 2019

BIOM301 Introduction to Biometrics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: FSAR

Prerequisite: MATH113 or MATH115. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201.

Descriptive statistics, introduction to probability, sampling, confidence interval estimation, hypothesis testing, simple regression and correlation. Emphasis on simple applications of statistical techniques and interpretation of statistical results.

0101	Christine Hakenkamp TuTh 2:00pm - 2:50pm M 1:00pm - 1:50pm	Seats (Total: 26) EGR 1202 ANS 0473	Discussion
0102	Christine Hakenkamp TuTh 2:00pm - 2:50pm M 2:00pm - 2:50pm	Seats (Total: 26) EGR 1202 ANS 0473	Discussion
0103	Christine Hakenkamp TuTh 2:00pm - 2:50pm M 3:00pm - 3:50pm	Seats (Total: 26) EGR 1202 ANS 0473	Discussion
0104	Christine Hakenkamp TuTh 2:00pm - 2:50pm Tu 9:30am - 10:20am	Seats (Total: 26) EGR 1202 ANS 0473	Discussion
0105	Christine Hakenkamp TuTh 2:00pm - 2:50pm Tu 11:00am - 11:50am	Seats (Total: 26) EGR 1202 ANS 0473	Discussion
0106	Christine Hakenkamp TuTh 2:00pm - 2:50pm Tu 12:30pm - 1:20pm	Seats (Total: 25) EGR 1202 ANS 0473	Discussion
0107	Christine Hakenkamp TuTh 2:00pm - 2:50pm M 10:00am - 10:50am	Seats (Total: 25) EGR 1202 ANS 0473	Discussion

BIOM405

(Perm req)

Computer Applications in Biometrics

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

An introduction to computer applications for data analysis. This is equivalent to the computer lab of 601 and is required for students that have taken BIOM 301 and BIOM402 and wish to go directly into BIOM602.

0101	Li Ma Contact instructor or department for details.	Seats (Total: 5)	
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BIOM601**Biostatistics I**

Credits: 4

Grading Method: Regular,
Audit

Prerequisite: BIOM301 or STAT464; or students who have taken courses with comparable content may contact the department. Credit only granted for: BIOM401 or BIOM601.

Estimation and hypothesis testing, t tests, one and two way analysis of variance, regression, analysis of frequency data. Lecture will emphasize uses and limitations of these methods in biology, while the laboratory will emphasize the use of statistical analysis software for the analysis of biological data.

0101	Li Ma	Seats (Total: 27)	
	TuTh 12:30pm - 1:45pm	ANS 0408	
	Tu 2:00pm - 4:00pm	ANS 0473	Lab
0102	Li Ma	Seats (Total: 27)	
	TuTh 12:30pm - 1:45pm	ANS 0408	
	W 9:00am - 11:00am	ANS 0473	Lab
0104	Li Ma	Seats (Total: 27)	
	TuTh 12:30pm - 1:45pm	ANS 0408	
	Th 2:00pm - 4:00pm	ANS 0473	Lab

BIOM603**Biostatistics III**

Credits: 4

Grading Method: Regular,
Audit

Prerequisite: Must have completed a graduate-level statistical class; or students who have taken courses with comparable content may contact the department.

Applications and implementation of linear model analysis to biological data, including multivariate regression model, mixed model, generalized linear mixed model, nonlinear logistic and Poisson regression models, power calculation and survival analysis.

0101	Jiuzhou Song	Seats (Total: 10)	
	MW 9:00am - 10:15am	Location: TBA	
	Th 9:00am - 10:50am	Location: TBA	Lab

BIOM688A**Topics in Biometrics; Consulting Experience in Biometrics**

Credits: 1-3

Grading Method: Regular,
Audit

Advanced topics of current interest in various areas of biometrics. Credit assigned will depend on lecture and/or laboratory time scheduled and organization of the course.

Contact department for information to register for this course.

BIOM698 Special Problems in Biometrics

Credits: 1-3 Grading Method: Regular,
Audit

Individual study of a particular topic in biostatistics or biomathematics.

Contact department for information to register for this course.

BIPH Biophysics **Fall 2019**

BIPH698L Biophysics Seminar; Biophysics

Credits: 1 Grading Method: Regular,
Audit

0101	Arpita Upadhyaya	Seats (Total: 10)
	M 4:00pm - 5:30pm	IPT 1116

BIPH699 Research in Biophysics

Credits: 2 Grading Method: Regular

Supervised research in biophysics laboratories. Rotations through several laboratories prior to a choice of laboratory for a research assistantship.

Contact department for information to register for this course.

BIPH704 Cell Biology from a Biophysical Perspective

Credits: 3 Grading Method: Regular

Recommended: BSCI330, PHYS121, and PHYS122. Jointly offered with BSCI40 4, BIOL704. Credit only granted for: BSCI404, BIOL704, BIOL708O, or BIPH704.

An approach to cell biology by focusing on mechanisms and unifying paradigms. It will not assume a great deal of factual biological knowledge, but will expect a background that prepares students to think quantitatively and mechanistically.

0101	Sergei Sukharev	Seats (Total: 9)
	TuTh 3:30pm - 4:45pm	PLS 1113

BIPH898 Pre-Candidacy Research

(Perm req)

Credits: 1-8

Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

BIPH899

Doctoral Dissertation Research

(Perm req)

Credits: 6

Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

BISI

Biological Sciences

Fall 2019

BISI678B

Rotations in Biological Sciences; Rotations in BEES

Credits: 1-3

Grading Method: Sat-Fail

Laboratory rotations for pre-candidacy doctoral students in Biological Sciences program.

0101	Instructor: TBA	Seats (Total: 12)
	TBA	BPS 1247

BISI678C

Rotations in Biological Sciences; Rotations in CBBG

Credits: 1-3

Grading Method: Sat-Fail

Laboratory rotations for pre-candidacy doctoral students in Biological Sciences program.

0101	Stephen Mount	Seats (Total: 12)
	TBA	BPS 1247

BISI678D

Rotations in Biological Sciences; Program Director Rotations

Credits: 1-3

Grading Method: Sat-Fail

Laboratory rotations for pre-candidacy doctoral students in Biological Sciences program.

0101	Charles Delwiche	Seats (Total: 12)
	TBA	BPS 1247

BISI678M

Rotations in Biological Sciences; Rotations in MOCB

Credits: 1-3

Grading Method: Sat-Fail

Laboratory rotations for pre-candidacy doctoral students in Biological Sciences program.

0101	Wade Winkler	Seats (Total: 12)
	TBA	BPS 1247

BISI678P Rotations in Biological Sciences; Rotations in PSYS

Credits: 1-3 Grading Method: Sat-Fail

Laboratory rotations for pre-candidacy doctoral students in Biological Sciences program.

0101	Instructor: TBA	Seats (Total: 12)
	TBA	BPS 1247

BISI678Z Rotations in Biological Sciences; Rotations

Credits: 1-3 Grading Method: Sat-Fail

Laboratory rotations for pre-candidacy doctoral students in Biological Sciences program.

0101	Michael Cummings	Seats (Total: 12)
	TBA	BPS 1247

BISI701 Teaching & Professional Development in Biology

Credits: 1 Grading Method: Sat-Fail

Cross-listed with ENTM701. Credit only granted for: ENTM701, BISI688Z, CBMG688Z, or BIOL701. Formerly: BISI688Z, CBMG688Z, BIOL701. Additional information: Priority in enrollment will be given to students in the BISI Graduate Program.

Provides graduate students in the biological sciences with the foundational knowledge to become better teaching assistants and gives them an introduction into the skills and tools that they need to develop as professional scientists and educators.

0101	Zakiya Whatley	Seats (Total: 30)
	Tu 6:00pm - 8:00pm	BPS 1208

BISI712 Responsible Conduct of Research for Biologists

Credits: 1 Grading Method: Regular

Credit only granted for: BISI712, BISI688B, or CBMG688B. Formerly: BISI688B and CBMG688B.

An exploration of the ethical dimensions associated with the responsible conduct of scientific research focusing on providing students with practical insights into the existing norms and expectations of working scientists.

0101	David Mosser	Seats (Total: 20)
	Meets August 26, 2019 - October 11, 2019	
	Th 2:00pm - 4:00pm	ANS 0467

BISI799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

BISI898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Restriction: Must be in Biological Sciences (Doctoral) program.

Contact department for information to register for this course.

BISI899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

BMGT Business and Management **Fall 2019**

BMGT099 Internship Seminar

(Perm req)

Credits: 0 Grading Method: Sat-Fail

Complements students' supervised work experiences. Involves exploring career options, developing professional work skills, examining the relationship between internship and academic coursework. Course may be repeated.

Contact department for information to register for this course.

BMGT110 Introduction to the Business Value Chain

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: IE

Students are provided with an introduction to the business value chain with an emphasis on inter-organizational and intra-organizational coordination of core business processes. Emphasis is on cross-functional integration and the efficient and effective management of core processes with an emphasis on marketing, operations and supply chain management.

0101	Jeff Miller	Seats (Total: 250)
	TuTh 12:30pm - 1:45pm	VMH 1524
FC01	Jeff Miller	Seats (Total: 75)
	TuTh 4:30pm - 5:45pm	SHM 2102
	<i>Restricted to students in Freshmen Connection.</i>	

BMGT110F
Introduction to the Business Value Chain

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: IE

Restricted to Smith School's Smith Start (FPFF) students.

FP01	Jeffrey Mund	Seats (Total: 35)
	MW 9:30am - 10:45am	VMH 1311
FP02	Jeffrey Mund	Seats (Total: 35)
	MW 11:00am - 12:15pm	VMH 1311
FP03	Koki Nagata	Seats (Total: 35)
	MW 2:00pm - 3:15pm	VMH 1311
FP04	Hugh Turner	Seats (Total: 35)
	M 8:00am - 9:15am	VMH 1335
	Class time/details on ELMs	ONLINE
FP05	Hugh Turner	Seats (Total: 35)
	Tu 8:00am - 9:15am	VMH 1336
	Class time/details on ELMs	ONLINE
FP06	Richard Hutchins	Seats (Total: 35)
	TuTh 9:30am - 10:45am	VMH 1311
FP07	Richard Hutchins	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	VMH 1311
FP08	Leland Gardner	Seats (Total: 35)
	MW 12:30pm - 1:45pm	TWS 0236

FP09	Hugh Turner W 8:00am - 9:15am Class time/details on ELMs	Seats (Total: 35) VMH 1335 ONLINE
FP10	Hugh Turner Th 8:00am - 9:15am Class time/details on ELMs	Seats (Total: 35) VMH 1336 ONLINE
FP11	Hugh Turner F 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 35) VMH 1415 ONLINE
FP12	Hugh Turner F 11:00am - 12:15pm Class time/details on ELMs	Seats (Total: 35) VMH 1415 ONLINE

BMGT190H

Introduction to Design and Quality

Credits: 4

Grading Method: Regular

General Education: DSSP

Restriction: Must be in the Quest program. Cross-listed with ENES190. Credit only granted for: BMGT190 or ENES190.

QUEST students learn and apply design practices to design new products and services. Working in multidisciplinary teams, students use quality and process improvement methods to identify, analyze, and recommend solutions to real-world problems.

Restricted to Quest Program students.

A Fearless Ideas Course from the Academy for Innovation & Entrepreneurship (AIE): [Click here](#) for more information on the Fearless Ideas Courses.

0101	Pamela Armstrong TuTh 12:30pm - 1:45pm Tu 6:00pm - 7:50pm	Seats (Total: 45) VMH 1415 VMH 1335	Discussion
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BMGT198A

Special Topics in Business and Management; Creating a Purposeful Life & Career

(Perm req)

Credits: 1

Grading Method: Regular

Introductory special topics in business and management.

0101	Jacqueline Manger	Seats (Total: 30)
	Meets October 21, 2019 - December 6, 2019	
	M 7:00pm - 7:50pm	ONLINE
	Class time/details on ELMs	ONLINE
	<i>Synchronous online meetings 10/21, 10/28, 11/4, 11/11, 11/18, and 12/2.</i>	
0201	Jacqueline Manger	Seats (Total: 30)
	Meets October 21, 2019 - December 6, 2019	
	W 6:00pm - 6:50pm	ONLINE
	Class time/details on ELMs	ONLINE
	<i>Synchronous online meetings 10/23, 10/30, 11/6, 11/13, 11/20, and 12/4.</i>	
0301	Jacqueline Manger	Seats (Total: 30)
	Meets October 21, 2019 - December 6, 2019	
	F 12:00pm - 12:50pm	ONLINE
	Class time/details on ELMs	ONLINE
	<i>Synchronous online meetings 10/25, 11/1, 11/8, 11/15, 11/22, and 12/6.</i>	

BMGT210

Foundations of Accounting for Non Business Majors

Credits: 3

Grading Method: Regular

Restriction: Must not have completed BMGT221; and must not be in a major in the R.H. Smith School of Business. Credit only granted for: (BMGT220 and BMGT221) or BMGT210. Additional information: Does not apply to a Smith School degree. Students pursuing a Smith School minor who have completed both BMGT220 and BMGT221 may substitute these courses for BMGT210. Credit will not be given for both BMGT210 and the combination of BMGT220 and BMGT221.

Provides an understanding of the common statements that report a company's profitability and financial health, and are useful to all economic agents who are engaged with the firm. Students will also recognize and understand managerial accounting as a system for accumulating and modeling information to support decision-making.

Restricted to General Business Minors

0101	Eugene Cantor	Seats (Total: 30)
	MW 12:30pm - 1:45pm	ESJ 1215
	F 9:00am - 9:50am	VMH 1203
		Discussion

0102	Eugene Cantor MW 12:30pm - 1:45pm F 10:00am - 10:50am	Seats (Total: 30) ESJ 1215 VMH 1203	Discussion
0201	Eugene Cantor MW 3:30pm - 4:45pm F 11:00am - 11:50am	Seats (Total: 30) ESJ 1215 VMH 1203	Discussion
0202	Eugene Cantor MW 3:30pm - 4:45pm F 12:00pm - 12:50pm	Seats (Total: 30) ESJ 1215 VMH 1203	Discussion

BMGT220

Principles of Accounting I

Credits: 3

Grading Method: Regular

Basic theory and techniques of contemporary financial accounting. Includes the accounting cycle and the preparation of financial statements for single owner and partnership forms of business organizations operating as service companies or merchandisers.

Open to all students with 24 credit hours completed.

0101	Progyan Basu MW 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 42) VMH 1212 VMH 1206	Discussion
0102	Progyan Basu MW 9:30am - 10:45am F 11:00am - 11:50am	Seats (Total: 42) VMH 1212 VMH 1206	Discussion
0103	Progyan Basu MW 9:30am - 10:45am F 12:00pm - 12:50pm	Seats (Total: 42) VMH 1212 VMH 1206	Discussion
0104	Progyan Basu MW 9:30am - 10:45am F 1:00pm - 1:50pm	Seats (Total: 42) VMH 1212 VMH 1206	Discussion
0201	Progyan Basu MW 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 42) VMH 1212 VMH 1307	Discussion

0202	Progyan Basu MW 11:00am - 12:15pm F 11:00am - 11:50am	Seats (Total: 42) VMH 1212 VMH 1307	Discussion
0203	Progyan Basu MW 11:00am - 12:15pm F 12:00pm - 12:50pm	Seats (Total: 42) VMH 1212 VMH 1307	Discussion
0204	Progyan Basu MW 11:00am - 12:15pm F 1:00pm - 1:50pm	Seats (Total: 42) VMH 1212 VMH 1307	Discussion
0301	Progyan Basu MW 12:30pm - 1:45pm F 10:00am - 10:50am	Seats (Total: 40) VMH 1212 VMH 1311	Discussion
0302	Progyan Basu MW 12:30pm - 1:45pm F 11:00am - 11:50am	Seats (Total: 40) VMH 1212 VMH 1311	Discussion
0303	Progyan Basu MW 12:30pm - 1:45pm F 12:00pm - 12:50pm	Seats (Total: 40) VMH 1212 VMH 1311	Discussion
0304	Progyan Basu MW 12:30pm - 1:45pm F 1:00pm - 1:50pm	Seats (Total: 40) VMH 1212 VMH 1311	Discussion

BMGT220H
Principles of Accounting I

Credits: 3 Grading Method: Regular

Basic theory and techniques of contemporary financial accounting. Includes the accounting cycle and the preparation of financial statements for single owner and partnership forms of business organizations operating as service companies or merchandisers.

Restricted to Honors students with 24 credit hours completed.

0101	Stephen Brown MW 3:30pm - 4:45pm	Seats (Total: 30) VMH 1415
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BMGT221
Principles of Accounting II

Credits: 3 Grading Method: Regular

Prerequisite: BMGT220.

Basic theory and techniques of accounting for managerial decision making. Involves the introduction of the corporation and manufacturing operations. Includes cost-volume-profit analysis and capital budgeting. Introduces the topics of income taxation and international accounting.

Restricted to students with 24 credit hours completed.

0101	Gary Bulmash TuTh 12:30pm - 1:45pm F 2:00pm - 2:50pm	Seats (Total: 35) VMH 1212 VMH 1335	Discussion
0102	Gary Bulmash TuTh 12:30pm - 1:45pm F 10:00am - 10:50am	Seats (Total: 35) VMH 1212 VMH 1335	Discussion
0103	Gary Bulmash TuTh 12:30pm - 1:45pm F 11:00am - 11:50am	Seats (Total: 35) VMH 1212 VMH 1335	Discussion
0104	Gary Bulmash TuTh 12:30pm - 1:45pm F 12:00pm - 12:50pm	Seats (Total: 35) VMH 1212 VMH 1335	Discussion
0105	Gary Bulmash TuTh 12:30pm - 1:45pm F 1:00pm - 1:50pm	Seats (Total: 35) VMH 1212 VMH 1335	Discussion
0201	Gary Bulmash TuTh 2:00pm - 3:15pm F 2:00pm - 2:50pm	Seats (Total: 35) VMH 1212 VMH 1336	Discussion
0202	Gary Bulmash TuTh 2:00pm - 3:15pm F 10:00am - 10:50am	Seats (Total: 35) VMH 1212 VMH 1336	Discussion
0203	Gary Bulmash TuTh 2:00pm - 3:15pm F 11:00am - 11:50am	Seats (Total: 35) VMH 1212 VMH 1336	Discussion

0204	Gary Bulmash	Seats (Total: 35)	
	TuTh 2:00pm - 3:15pm	VMH 1212	
	F 12:00pm - 12:50pm	VMH 1336	Discussion
0205	Gary Bulmash	Seats (Total: 35)	
	TuTh 2:00pm - 3:15pm	VMH 1212	
	F 1:00pm - 1:50pm	VMH 1336	Discussion

BMGT221H Principles of Accounting II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BMGT220.

Basic theory and techniques of accounting for managerial decision making. Involves the introduction of the corporation and manufacturing operations. Includes cost-volume-profit analysis and capital budgeting. Introduces the topics of income taxation and international accounting.

Course restricted to University Honors Students with 24 credit hours completed.

0101	Gary Bulmash	Seats (Total: 35)	
	TuTh 3:30pm - 4:45pm	VMH 1314	

BMGT230 Business Statistics

Credits: 3 Grading Method: Regular General Education: FSAR

Prerequisite: MATH113 or MATH115; or must have math eligibility of MATH120 or higher. Restriction: Must not have completed ENCE302, ENME392, STAT400, BMGT231, or ENEE324. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introductory course in probabilistic and statistical concepts including descriptive statistics, set-theoretic development of probability, the properties of discrete and continuous random variables, sampling theory, estimation, hypothesis testing, regression and decision theory and the application of these concepts to problem solving in business and management.

0101	Erich Studer-Ellis	Seats (Total: 30)	
	MW 9:30am - 10:45am	VMH 1524	
	F 8:00am - 8:50am	VMH 1314	Discussion

0102	Erich Studer-Ellis MW 9:30am - 10:45am F 9:00am - 9:50am	Seats (Total: 18) VMH 1524 VMH 1314	Discussion
0103	Erich Studer-Ellis MW 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 30) VMH 1524 VMH 1314	Discussion
0104	Erich Studer-Ellis MW 9:30am - 10:45am F 11:00am - 11:50am	Seats (Total: 17) VMH 1524 VMH 1314	Discussion
0105	Erich Studer-Ellis MW 9:30am - 10:45am F 12:00pm - 12:50pm	Seats (Total: 18) VMH 1524 VMH 1314	Discussion
0106	Erich Studer-Ellis MW 9:30am - 10:45am F 1:00pm - 1:50pm	Seats (Total: 30) VMH 1524 VMH 1314	Discussion
0107	Erich Studer-Ellis MW 9:30am - 10:45am F 2:00pm - 2:50pm	Seats (Total: 30) VMH 1524 VMH 1314	Discussion
0201	Erich Studer-Ellis MW 11:00am - 12:15pm F 8:00am - 8:50am	Seats (Total: 30) VMH 1524 VMH 1411	Discussion
0202	Erich Studer-Ellis MW 11:00am - 12:15pm F 9:00am - 9:50am	Seats (Total: 30) VMH 1524 VMH 1411	Discussion
0203	Erich Studer-Ellis MW 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 30) VMH 1524 VMH 1411	Discussion
0204	Erich Studer-Ellis MW 11:00am - 12:15pm F 11:00am - 11:50am	Seats (Total: 30) VMH 1524 VMH 1411	Discussion

0205	Erich Studer-Ellis MW 11:00am - 12:15pm F 12:00pm - 12:50pm	Seats (Total: 17) VMH 1524 VMH 1411	Discussion
0206	Erich Studer-Ellis MW 11:00am - 12:15pm F 1:00pm - 1:50pm	Seats (Total: 19) VMH 1524 VMH 1411	Discussion
0207	Erich Studer-Ellis MW 11:00am - 12:15pm F 2:00pm - 2:50pm	Seats (Total: 20) VMH 1524 VMH 1411	Discussion
0301	Erich Studer-Ellis MW 12:30pm - 1:45pm F 8:00am - 8:50am	Seats (Total: 30) VMH 1524 VMH 1418	Discussion
0302	Erich Studer-Ellis MW 12:30pm - 1:45pm F 9:00am - 9:50am	Seats (Total: 23) VMH 1524 VMH 1418	Discussion
0303	Erich Studer-Ellis MW 12:30pm - 1:45pm F 10:00am - 10:50am	Seats (Total: 17) VMH 1524 VMH 1418	Discussion
0304	Erich Studer-Ellis MW 12:30pm - 1:45pm F 11:00am - 11:50am	Seats (Total: 17) VMH 1524 VMH 1418	Discussion
0305	Erich Studer-Ellis MW 12:30pm - 1:45pm F 12:00pm - 12:50pm	Seats (Total: 22) VMH 1524 VMH 1418	Discussion
0306	Erich Studer-Ellis MW 12:30pm - 1:45pm F 1:00pm - 1:50pm	Seats (Total: 17) VMH 1524 VMH 1418	Discussion
0307	Erich Studer-Ellis MW 12:30pm - 1:45pm F 2:00pm - 2:50pm	Seats (Total: 30) VMH 1524 VMH 1418	Discussion

0401	Ai Ren	Seats (Total: 30)
	MW 12:30pm - 1:45pm	SQH 1103
FC01	Radu Lazar	Seats (Total: 32)
	MW 4:30pm - 5:45pm	SQH 1107
	<i>Restricted to students in Freshman Connection.</i>	

BMGT230B Business Statistics

Credits: 3

Grading Method: Regular

General Education: FSAR

Prerequisite: MATH113 or MATH115; or must have math eligibility of MATH120 or higher. Restriction: Must not have completed ENCE302, ENME392, STAT400, BMGT231, or ENEE324. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introductory course in probabilistic and statistical concepts including descriptive statistics, set-theoretic development of probability, the properties of discrete and continuous random variables, sampling theory, estimation, hypothesis testing, regression and decision theory and the application of these concepts to problem solving in business and management.

Restricted to BMGT majors.

0102	Erich Studer-Ellis	Seats (Total: 12)
	MW 9:30am - 10:45am	VMH 1524
	F 9:00am - 9:50am	VMH 1314 Discussion
0104	Erich Studer-Ellis	Seats (Total: 13)
	MW 9:30am - 10:45am	VMH 1524
	F 11:00am - 11:50am	VMH 1314 Discussion
0105	Erich Studer-Ellis	Seats (Total: 12)
	MW 9:30am - 10:45am	VMH 1524
	F 12:00pm - 12:50pm	VMH 1314 Discussion
0205	Erich Studer-Ellis	Seats (Total: 13)
	MW 11:00am - 12:15pm	VMH 1524
	F 12:00pm - 12:50pm	VMH 1411 Discussion

0206	Erich Studer-Ellis MW 11:00am - 12:15pm F 1:00pm - 1:50pm	Seats (Total: 11) VMH 1524 VMH 1411	Discussion
0207	Erich Studer-Ellis MW 11:00am - 12:15pm F 2:00pm - 2:50pm	Seats (Total: 10) VMH 1524 VMH 1411	Discussion
0302	Erich Studer-Ellis MW 12:30pm - 1:45pm F 9:00am - 9:50am	Seats (Total: 7) VMH 1524 VMH 1418	Discussion
0303	Erich Studer-Ellis MW 12:30pm - 1:45pm F 10:00am - 10:50am	Seats (Total: 13) VMH 1524 VMH 1418	Discussion
0304	Erich Studer-Ellis MW 12:30pm - 1:45pm F 11:00am - 11:50am	Seats (Total: 13) VMH 1524 VMH 1418	Discussion
0305	Erich Studer-Ellis MW 12:30pm - 1:45pm F 12:00pm - 12:50pm	Seats (Total: 8) VMH 1524 VMH 1418	Discussion
0306	Erich Studer-Ellis MW 12:30pm - 1:45pm F 1:00pm - 1:50pm	Seats (Total: 13) VMH 1524 VMH 1418	Discussion

BMGT230H

Business Statistics

Credits: 3

Grading Method: Regular

General Education: FSAR

Prerequisite: MATH113 or MATH115; or must have math eligibility of MATH120 or higher. Restriction: Must not have completed ENCE302, ENME392, STAT400, BMGT231, or ENEE324. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introductory course in probabilistic and statistical concepts including descriptive statistics, set-theoretic development of probability, the properties of discrete and continuous random variables, sampling theory, estimation, hypothesis testing, regression and decision theory and the application of these concepts to problem solving in business and management.

Restricted to Honors students.

0101	Radu Lazar	Seats (Total: 35)
	TuTh 9:30am - 10:45am	VMH 1307

BMGT289A Social Enterprise: Changing the World through Innovation and Transformative Action

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSSP, SCIS

0101	Le-Marie Thompson	Seats (Total: 65)
	W 5:00pm - 7:40pm	TYD 1101

BMGT289B How Do Innovators Think?

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP, SCIS

Credit will be granted for only one of the following: BMGT289B or HONR289P.

0101	Mark Wellman	Seats (Total: 50)
	W 5:00pm - 7:40pm	ESJ 1215
FC01	Mark Wellman	Seats (Total: 30)
	F 1:00pm - 4:00pm	SQH 1119
<i>Restricted to students in Freshmen Connection.</i>		

BMGT289D Frauds, Scams, and Thefts: What, How and Why?

Credits: 3 Grading Method: Regular General Education: DSSP, SCIS

0101	Samuel Handwerger	Seats (Total: 65)
	MW 3:30pm - 4:45pm	ESJ 1202
0201	Samuel Handwerger	Seats (Total: 65)
	MW 5:00pm - 6:15pm	ESJ 1202

BMGT289E Entrepreneurial Thinking for Non-Business Majors: How Not to Miss Great Opportunities Your Life Throws at You

Credits: 3 Grading Method: Regular CORE: IE General Education: DSSP, SCIS

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Introductory special topics in business and management.

Contact department for information to register for this course.

BMGT301**Introduction to Information Systems**

Credits: 3

Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business. Additional information: CMSC majors will not receive credit for this course towards their upper level concentration in their CMSC major. All BMGT majors, including students who are a double major in CMCS, must complete BMGT301 for their BMGT degree.

Comprehensive overview of information systems (IS), which explores the strategic and tactical nature of IS. The basic concepts in analyzing and designing information systems for business applications will be presented. Aspects of data management such as databases, data warehousing, data analysis, and data mining will be analyzed, and the basics of web page and web site design will be outlined. Students will also be introduced to modern information systems infrastructure such as telecommunications, networks, and information systems security. Knowledge of Excel or a similar spreadsheet tool.

Restricted to BMGT majors with 53 credits completed.

0101	Zeinab Karake MW 2:00pm - 3:15pm	Seats (Total: 60) VMH 1303
0201	Zeinab Karake MW 3:30pm - 4:45pm	Seats (Total: 60) VMH 1303
0301	Jaehoon Jeong MW 5:00pm - 6:15pm	Seats (Total: 60) VMH 1412
0401	Zeinab Karake TuTh 12:30pm - 1:45pm	Seats (Total: 60) VMH 1303
0501	Zeinab Karake TuTh 3:30pm - 4:45pm	Seats (Total: 60) VMH 1303
0601	Zeinab Karake TuTh 5:00pm - 6:15pm	Seats (Total: 60) VMH 1303

BMGT301F**Introduction to Information Systems**

Credits: 3

Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business. Additional information: CMSC majors will not receive credit for this course towards their upper level concentration in their CMSC major. All BMGT majors, including students who are a double major in CMCS, must complete BMGT301 for their BMGT degree.

Comprehensive overview of information systems (IS), which explores the strategic and tactical nature of IS. The basic concepts in analyzing and designing information systems for business applications will be presented. Aspects of data management such as databases, data warehousing, data analysis, and data mining will be analyzed, and the basics of web page and web site design will be outlined. Students will also be introduced to modern information systems infrastructure such as telecommunications, networks, and information systems security. Knowledge of Excel or a similar spreadsheet tool.

Restricted to second year students in the Smith School's Smith Start program (FPFF).

FP01	Zeinab Karake	Seats (Total: 60)
	MW 9:30am - 10:45am	VMH 1303
FP02	Zeinab Karake	Seats (Total: 60)
	MW 11:00am - 12:15pm	VMH 1303

BMGT302 Designing Applications for Business Analytics

Credits: 3 Grading Method: Regular

Prerequisite: BMGT301; or permission of BMGT-Robert H. Smith School of Business. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business; and must not be in Computer Science program.

Provides an introduction to structured programming with business applications. Programming logic and data structures are introduced. The course especially emphasizes hands-on exercises using Excel macros and Visual Basic for Applications (VBA), and covers business functions and analytics.

Restricted to BMGT majors with 53 credit hours completed. Not open to Computer Science Majors.

0101	John Bono	Seats (Total: 32)
	TuTh 3:30pm - 4:45pm	VMH 2203
0201	John Bono	Seats (Total: 32)
	TuTh 9:30am - 10:45am	VMH 2203
0301	Peng Huang	Seats (Total: 32)
	TuTh 12:30pm - 1:45pm	VMH 2203
0401	John Bono	Seats (Total: 24)
	MW 2:00pm - 3:15pm	VMH 3522

BMGT302F Designing Applications for Business Analytics

Credits: 3 Grading Method: Regular

Prerequisite: BMGT301; or permission of BMGT-Robert H. Smith School of Business. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business; and must not be in Computer Science program.

Provides an introduction to structured programming with business applications. Programming logic and data structures are introduced. The course especially emphasizes hands-on exercises using Excel macros and Visual Basic for Applications (VBA), and covers business functions and analytics.

Restricted to students in the Smith School's TBT Fellows program.

FP01	Peng Huang	Seats (Total: 25)	
	TuTh 11:00am - 12:15pm	VMH 2203	
	Th 5:00pm - 6:00pm	VMH 2203	Discussion

BMGT310 Intermediate Accounting I

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221.

Comprehensive analysis of financial accounting topics related to financial statement preparation and external reporting.

0101	Tharinda W Ranasinghe	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	VMH 1314
	<i>Restricted to Accounting and Finance majors with 53 credit hours completed.</i>	
0201	Jin Choi	Seats (Total: 35)
	MW 9:30am - 10:45am	VMH 1206
	<i>Restricted to Accounting and Finance majors with 53 credit hours completed.</i>	
0301	Tharinda W Ranasinghe	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	VMH 1314
	<i>Restricted to Accounting and Finance majors with 53 credit hours completed.</i>	
SG91	Musa Subasi	Seats (Total: 45)
	TuTh 12:30pm - 1:45pm	BLD3 3202
	<i>Restricted to Junior BMGT-Shady Grove students majoring in Accounting. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>	

SG92	Musa Subasi	Seats (Total: 45)
	TuTh 11:00am - 12:15pm	BLD3 3202
<i>Restricted to BMGT-Shady Grove Juniors majoring in Accounting. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>		

BMGT311 Intermediate Accounting II

Credits: 3 Grading Method: Regular

Prerequisite: BMGT310.

Continuation of BMGT310.

0101	Oliver Kim	Seats (Total: 35)
	TuTh 9:30am - 10:45am	VMH 1314
<i>Restricted to accounting majors with 60 credit hours completed.</i>		
0201	Oliver Kim	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	VMH 1311
<i>Restricted to accounting majors with 60 credit hours completed.</i>		
0301	Oliver Kim	Seats (Total: 35)
	TuTh 3:30pm - 4:45pm	VMH 1311
<i>Restricted to accounting majors with 60 credit hours completed.</i>		
SG91	Stephen Brown	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm	BLD2 2062
<i>Restricted to BMGT-Shady Grove Seniors majoring in Accounting.</i>		

BMGT313 Financial Statement Analysis

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221.

Provides students with the tools to conduct a financial statement analysis, which is part of an overall business analysis. Involves understanding and using the information that financial statements are communicating to users.

Restricted to Accounting and Finance majors with 53 credits completed.

0101	Hanna Lee	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm	VMH 1511

0201	Hanna Lee	Seats (Total: 45)
	TuTh 9:30am - 10:45am	VMH 1336

BMGT313F Financial Statement Analysis

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221.

Provides students with the tools to conduct a financial statement analysis, which is part of an overall business analysis. Involves understanding and using the information that financial statements are communicating to users.

Restricted to Emerging CFOs (FPEC).

FP01	Nicholas Seybert	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	VMH 1336

BMGT321 Managerial Accounting

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221.

A study of the basic concepts of product costing and cost analysis for management planning and control. Emphasis is placed on the role of the accountant in organizational management, analysis of cost behavior, standard cost budgeting, responsibility accounting and relevant costs for decision-making.

0101	Michael Finch	Seats (Total: 30)
	MW 11:00am - 12:15pm	VMH 1206
0201	Michael Finch	Seats (Total: 30)
	MW 12:30pm - 1:45pm	VMH 1206
	<i>Restricted to BMGT majors with 53 credit hours completed.</i>	
0301	Michael Finch	Seats (Total: 30)
	MW 3:30pm - 4:45pm	VMH 1307
	<i>Restricted to BMGT majors with 53 credit hours completed.</i>	

SG91	Michael Finch	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	BLD3 3220
<i>Restricted to BMGT-Shady Grove Seniors majoring in Accounting. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>		
SG92	Michael Finch	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	BLD3 3220
<i>Restricted to BMGT-Shady Grove Seniors majoring in Accounting. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>		

BMGT323

Taxation of Individuals

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221.

Federal taxation of individuals focusing on income, exclusions, deductions, depreciation, credits and capital transactions. Property coverage includes the tax consequences of sales and dispositions of investment and business assets. Both tax planning and compliance issues are covered.

Restricted to Accounting majors with 53 credit hours completed.

0101	Leslie Mostow	Seats (Total: 35)
	MW 3:30pm - 4:45pm	VMH 1206
0201	Samuel Handwerger	Seats (Total: 35)
	TuTh 3:30pm - 4:45pm	VMH 1518
0301	Leslie Mostow	Seats (Total: 35)
	TuTh 5:00pm - 6:15pm	VMH 1518

BMGT326

Accounting Systems

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221; and (BMGT201 or BMGT301).

A study of accounting systems and computer and communications technology.

Restricted to Accounting majors with 60 credit hours completed.

0101	Sebahattin Demirkan MW 9:30am - 10:45am	Seats (Total: 35) VMH 1307
0201	James McKinney TuTh 12:30pm - 1:45pm	Seats (Total: 35) VMH 1336
0301	James McKinney TuTh 2:00pm - 3:15pm	Seats (Total: 35) VMH 1336

BMGT332
Quantitative Models for Management Decisions

Credits: 3 Grading Method: Regular

Prerequisite: BMGT231 or BMGT230; or students who have taken courses with comparable content may contact the department.

The aim of this course is to introduce management science techniques for informed decision-making that can be applied in spreadsheet models to assist in the decision-analysis process. Models include Linear Programming, Transportation and Assignment problems, network flow models, Integer and non-linear programming, Simulation and Decision Trees.

Restricted to BMGT majors and Quest students with 53 credit hours completed.

0101	Kazim Ruhi TuTh 9:30am - 10:45am	Seats (Total: 45) VMH 1520
0201	Maria Bardossy TuTh 11:00am - 12:15pm	Seats (Total: 45) VMH 1415
0301	Kazim Ruhi TuTh 2:00pm - 3:15pm	Seats (Total: 45) VMH 1524
0401	Kazim Ruhi TuTh 3:30pm - 4:45pm	Seats (Total: 45) VMH 1524

BMGT340
Business Finance

Credits: 3 Grading Method: Regular

Prerequisite: BMGT220; and (BMGT231 or BMGT230).

Topics include: the principles and practices involved in the organization, financing and rehabilitation of business enterprises; the various types of securities and their use in raising funds, apportioning income, risk and control; intercorporate relations; and new developments. Emphasis on solution of problems of financial policy faced by management.

0101	Michael Padhi MW 9:30am - 10:45am Class time/details on ELMs <i>Restricted to BMGT majors with 53 credit hours completed.</i>	Seats (Total: 63) VMH 1412 ONLINE
0201	Michael Padhi MW 11:00am - 12:15pm Class time/details on ELMs <i>Restricted to BMGT majors with 53 credit hours completed.</i>	Seats (Total: 63) VMH 1412 ONLINE
0301	Karen Hallows MW 2:00pm - 3:15pm Class time/details on ELMs <i>Restricted to BMGT majors with 53 credit hours completed.</i>	Seats (Total: 56) VMH 1412 ONLINE
0401	Karen Hallows TuTh 12:30pm - 1:45pm Class time/details on ELMs <i>Restricted to BMGT majors with 53 credit hours completed.</i>	Seats (Total: 63) VMH 1412 ONLINE
0501	Karen Hallows TuTh 3:30pm - 4:45pm Class time/details on ELMs <i>Restricted to BMGT majors with 53 credit hours completed.</i>	Seats (Total: 63) VMH 1412 ONLINE
0601	Karen Hallows TuTh 5:00pm - 6:15pm Class time/details on ELMs <i>Restricted to BMGT majors with 53 credit hours completed.</i>	Seats (Total: 63) VMH 1412 ONLINE
0701	Karen Hallows MW 3:30pm - 4:45pm Class time/details on ELMs <i>Restricted to BMGT majors with 53 credit hours completed.</i>	Seats (Total: 63) VMH 1412 ONLINE

SG91	Michael Padhi TuTh 11:00am - 12:15pm <i>Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>	Seats (Total: 60) BLD2 3032
SG92	Michael Padhi TuTh 12:30pm - 1:45pm <i>Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>	Seats (Total: 60) BLD2 3032
SG93	Michael Padhi TuTh 2:00pm - 3:15pm <i>Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>	Seats (Total: 60) BLD2 3032

BMGT340F
Business Finance

Credits: 3 Grading Method: Regular

Prerequisite: BMGT220; and (BMGT231 or BMGT230).

Topics include: the principles and practices involved in the organization, financing and rehabilitation of business enterprises; the various types of securities and their use in raising funds, apportioning income, risk and control; intercorporate relations; and new developments. Emphasis on solution of problems of financial policy faced by management.

Restricted to students in the Smith School's Sophomore Finance Fellows Program.

FP01	David Kass MW 2:00pm - 3:15pm	Seats (Total: 41) VMH 1411
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BMGT340N
Business Finance

Credits: 3 Grading Method: Regular

Prerequisite: BMGT220; and (BMGT231 or BMGT230).

Topics include: the principles and practices involved in the organization, financing and rehabilitation of business enterprises; the various types of securities and their use in raising funds, apportioning income, risk and control; intercorporate relations; and new developments. Emphasis on solution of problems of financial policy faced by management.

Restricted to agricultural and resource economics majors (0111C) with 53 credit hours completed.

0301	Karen Hallows	Seats (Total: 7)
	MW 2:00pm - 3:15pm	VMH 1412
	Class time/details on ELMs	ONLINE

BMGT341**Financial Markets**

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in BMGT340. Formerly: BMGT498G.

Shows the interconnectedness of the markets. The role of the Central bank and monetary policy is included in this context. Students develop an understanding of: (i) the determination of interest rates; (ii) financial instruments, markets and institutions; (iii) the impact of monetary policy on institutions; and (iv) how financial innovations create markets.

Restricted to Finance majors with 60 credit hours completed.

0101	Julie Pavlovsky	Seats (Total: 45)
	TuTh 9:30am - 10:45am	VMH 1418
0201	Julie Pavlovsky	Seats (Total: 45)
	TuTh 11:00am - 12:15pm	VMH 1418
0301	Julie Pavlovsky	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm	VMH 1418

BMGT342F**Wall Street Finance**

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340. Credit only granted for: BMGT448F or BMGT342. Formerly: BMGT448F.

Using concepts and tools of finance, students will examine a wide range of business problems and explore possible solutions. The course is designed to improve a student's problem solving capabilities, business writing and communication skills, teamwork, and planning skills. Students will also gain experience in analyzing issues frequently faced by financial decision-makers.

Restricted to Junior Wall Street Fellows.

FP01	Julie Pavlovsky	Seats (Total: 35)
	TuTh 3:30pm - 4:45pm	VMH 1418

BMGT343**Investments**

Credits: 3

Grading Method: Regular

Prerequisite: BMGT340. Credit only granted for: BMGT343 or ECON435. Additional information: This course cannot be used to fulfill any requirements for majors in Economics.

An introduction to financial investments. Topics include: securities and securities markets; investment risks, returns and constraints; portfolio policies; and institutional investment policies.

Restricted to Finance majors with 60 credit hours completed.

0101	Ryan Guttridge MW 12:30pm - 1:45pm	Seats (Total: 45) VMH 1411
0201	Kenneth Fuller TuTh 11:00am - 12:15pm	Seats (Total: 45) VMH 1411
0301	Kenneth Fuller TuTh 12:30pm - 1:45pm	Seats (Total: 45) VMH 1411
0401	Ryan Guttridge MW 11:00am - 12:15pm	Seats (Total: 45) VMH 1411
0501	Ryan Guttridge MW 5:00pm - 6:15pm	Seats (Total: 45) VMH 1411

BMGT345**Foundations of Financial Management for Non Business Majors**

Credits: 3

Grading Method: Regular

Prerequisite: BMGT210 or BMGT220. Restriction: Must not have completed BMGT340; and must not be a major in the R.H. Smith School of Business. Credit only granted for: BMGT345 or BMGT340. Additional information: Course does not apply to a Smith School degree. BMGT340 may substitute for BMGT345.

Provides students an overview of financial management. Students will understand how a business allocates financial resources in an uncertain environment to maximize shareholder value. In addition students will learn the following: how to apply accounting principles to corporate finance; how to value assets, projects, companies and investment securities; understand the relationship between risk and return and how it impacts investment and corporate decisions; how to calculate a company's cost of capital, and develop an intuitive comprehension of financial concepts and analysis.

Restricted to General Business Minors.

0101	Michael Padhi	Seats (Total: 100)
	MW 3:30pm - 4:45pm	ESJ 2204
	Class time/details on ELMs	ONLINE

BMGT350

Marketing Principles and Organization

Credits: 3 Grading Method: Regular

Recommended: ECON200.

An introduction to the concepts and principles of marketing including the marketing of service and nonprofit organizations. Provides an overview of all the concepts in marketing including relationship marketing, product development, pricing, promotion, marketing research, consumer behavior, international marketing, distribution and internal marketing to employees.

0101	Roxanne Lefkoff	Seats (Total: 60)
	M 9:30am - 10:45am	VMH 1520
	Class time/details on ELMs	ONLINE
<i>Restricted to BMGT majors with 53 credit hours completed.</i>		
0201	Roxanne Lefkoff	Seats (Total: 60)
	M 11:00am - 12:15pm	VMH 1520
	Class time/details on ELMs	ONLINE
<i>Restricted to BMGT majors with 53 credit hours completed.</i>		
0301	Roxanne Lefkoff	Seats (Total: 60)
	M 2:00pm - 3:15pm	VMH 1520
	Class time/details on ELMs	ONLINE
<i>Restricted to BMGT majors with 53 credit hours completed.</i>		
0401	Marjorie Bonavia	Seats (Total: 54)
	W 9:30am - 10:45am	VMH 1520
	Class time/details on ELMs	ONLINE
<i>Restricted to BMGT majors with 53 credit hours completed.</i>		
0501	Marjorie Bonavia	Seats (Total: 60)
	W 11:00am - 12:15pm	VMH 1520
	Class time/details on ELMs	ONLINE
<i>Restricted to BMGT majors with 53 credit hours completed.</i>		

0601	Marjorie Bonavia W 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 60) VMH 1520 ONLINE
<i>Restricted to BMGT majors with 53 credit hours completed.</i>		
0701	Wendy McEntee W 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 60) VMH 1520 ONLINE
<i>Restricted to BMGT majors with 53 credit hours completed.</i>		
SG91	Henry Boyd MW 9:30am - 10:45am	Seats (Total: 60) BLD3 3241
<i>Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>		
SG92	Henry Boyd MW 11:00am - 12:15pm	Seats (Total: 60) BLD3 3241
<i>Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>		
SG93	Henry Boyd MW 2:00pm - 3:15pm	Seats (Total: 60) BLD3 3202
<i>Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>		

BMGT350M Marketing Principles and Organization

Credits: 3 Grading Method: Regular

Recommended: ECON200.

An introduction to the concepts and principles of marketing including the marketing of service and nonprofit organizations. Provides an overview of all the concepts in marketing including relationship marketing, product development, pricing, promotion, marketing research, consumer behavior, international marketing, distribution and internal marketing to employees.

Restricted to General Business Minors.

0101	Mary Beth Furst Tu 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 55) TWS 1310 ONLINE
0201	Mary Beth Furst Th 12:30pm - 1:45pm Class time/details on ELMs	Seats (Total: 55) TWS 1310 ONLINE

BMGT350N Marketing Principles and Organization

Credits: 3 Grading Method: Regular

Recommended: ECON200.

An introduction to the concepts and principles of marketing including the marketing of service and nonprofit organizations. Provides an overview of all the concepts in marketing including relationship marketing, product development, pricing, promotion, marketing research, consumer behavior, international marketing, distribution and internal marketing to employees.

Restricted to agricultural and resource economics (0111C) and horticulture (0107C) majors with 53 credit hours completed.

0401	Marjorie Bonavia W 9:30am - 10:45am Class time/details on ELMs	Seats (Total: 6) VMH 1520 ONLINE
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BMGT352 Customer-Centric Innovation

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350. Credit only granted for: BMGT352 or BMGT382.

Addresses the management of new products and services with a focus on the innovation process, specifically the development and launching of new products or services: Opportunity Identification, Concept Generation, Design, Testing and Launch.

0101	Yogesh Joshi TuTh 9:30am - 10:45am <i>Restricted to BMGT majors and students in the QUEST program with 60 credit hours completed.</i>	Seats (Total: 40) VMH 1415
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BMGT353 Retail Management

Credits: 3 Grading Method: Regular

Prerequisite: BMGT220 and BMGT350.

Planning and implementing retail marketing strategy. Store and nonstore (catalog, internet) retailing. Evaluation of how environmental trends in the consumer market, competition, the economy and technology affect retail strategy in the U.S. and global market.

Restricted to BMGT majors with 60 credit hours completed.

0101	Jie Zhang	Seats (Total: 45)
	TuTh 12:30pm - 1:45pm	VMH 1206
0201	Jie Zhang	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm	VMH 1206

BMGT360**Strategic Management of Human Capital**

Credits: 3 Grading Method: Regular

Provides students with the basic knowledge needed to help organizations attract, select, develop, engage, evaluate, and retain talent. Topics covered may include strategic HRM, the role of globalization, legal issues in HRM, work analysis, HR planning, recruitment, personnel selection, performance management and appraisal, training and development, career development, compensation systems, motivating and rewarding performance, labor relations, and employee health and safety.

0101	Jeffrey Kudisch	Seats (Total: 60)
	MW 2:00pm - 3:15pm	VMH 1212
	<i>Open to all students with 53 credit hours completed.</i>	
0201	Jeffrey Kudisch	Seats (Total: 60)
	MW 3:30pm - 4:45pm	VMH 1212
	<i>Open to all students with 53 credit hours completed.</i>	

BMGT362**Negotiations**

Credits: 3 Grading Method: Regular

Restriction: Must not have completed COMM425. Credit only granted for: BMGT362 or COMM425.

By using a variety of assessment tools, feedback sources, skill-building exercises, and exercise debriefings, this experiential course is designed to enhance students' negotiating self-confidence and improve students' analytical skills, interpersonal skills, creativity and persuasive abilities.

Restricted to Management majors with 53 credit hours completed.

0101	Gosia Langa Basit TuTh 2:00pm - 3:15pm	Seats (Total: 45) VMH 1303
SG91	Gosia Langa Basit TuTh 11:00am - 12:15pm	Seats (Total: 45) BLD2 2062

BMGT363 Leadership and Teamwork in Organizations

Credits: 3 Grading Method: Regular

Provides a comprehensive understanding of fundamental leadership concepts, theories, and skills in organizations and applies to assessing and developing effective leadership practices in organizations.

Restricted to Management majors with 53 credit hours completed.

0101	Gerald Suarez MW 5:00pm - 6:15pm	Seats (Total: 45) VMH 1336
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BMGT364 Managing People and Organizations

Credits: 3 Grading Method: Regular

An introduction to selected aspects of human behavior in organizations generally known as organizational behavior (OB). This course is designed to help students develop systematic and fundamental understanding of people and their behaviors in organizations, as well as useful abilities and skills required to effectively and ethically manage various individual, interpersonal, group, and organization-level processes.

0101	Rujiao Cao MW 12:30pm - 1:45pm	Seats (Total: 60) VMH 1303 <i>Restricted to BMGT majors with 53 credit hours completed.</i>
0201	Nicole Coomber MW 8:00am - 9:15am	Seats (Total: 60) VMH 1303 <i>Restricted to BMGT majors with 53 credit hours completed.</i>
0301	James Sanders MW 5:00pm - 6:15pm	Seats (Total: 60) VMH 1303 <i>Restricted to BMGT majors with 53 credit hours completed.</i>
0401	Gregory Marr TuTh 9:30am - 10:45am	Seats (Total: 60) VMH 1303 <i>Restricted to BMGT majors with 53 credit hours completed.</i>

0501	Gregory Marr TuTh 11:00am - 12:15pm <i>Restricted to BMGT majors with 53 credit hours completed.</i>	Seats (Total: 60) VMH 1303
0601	Gregory Marr TuTh 8:00am - 9:15am <i>Restricted to BMGT majors with 53 credit hours completed.</i>	Seats (Total: 60) VMH 1303
0701	Danielle Wang M 7:00pm - 9:40pm <i>Restricted to BMGT majors with 53 credit hours completed.</i>	Seats (Total: 60) VMH 1303
SG91	Hannah Weiser MW 8:00am - 9:15am <i>Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>	Seats (Total: 60) BLD3 4202
SG92	Hannah Weiser MW 9:30am - 10:45am <i>Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>	Seats (Total: 60) BLD3 4202
SG93	Hannah Weiser MW 11:00am - 12:15pm <i>Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>	Seats (Total: 60) BLD3 4202

BMGT364M Managing People and Organizations

Credits: 3 Grading Method: Regular

An introduction to selected aspects of human behavior in organizations generally known as organizational behavior (OB). This course is designed to help students develop systematic and fundamental understanding of people and their behaviors in organizations, as well as useful abilities and skills required to effectively and ethically manage various individual, interpersonal, group, and organization-level processes.

Restricted to General Business Minors

0101	Gregory Marr	Seats (Total: 115)
	MW 2:00pm - 3:15pm	SHM 2102

BMGT364N Managing People and Organizations

Credits: 3 Grading Method: Regular

An introduction to selected aspects of human behavior in organizations generally known as organizational behavior (OB). This course is designed to help students develop systematic and fundamental understanding of people and their behaviors in organizations, as well as useful abilities and skills required to effectively and ethically manage various individual, interpersonal, group, and organization-level processes.

Restricted to agricultural and resource economics (0111C) and dietetics (1307D) majors with 53 credit hours completed.

0101	Gregory Marr	Seats (Total: 5)
	MW 2:00pm - 3:15pm	SHM 2102

BMGT365 Entrepreneurial Finance and Private Equity

Credits: 3 Grading Method: Regular

Prerequisite: BMGT461 or BMGT361. Restriction: Junior standing or higher. Credit only granted for: BMGT365, ENES466 or HLMN471.

Studies venture capital and private equity using a combination of cases, lectures and guest speakers. Addresses how venture capitalists provide capital to start-up firms in growing industries and how private equity markets provide capital to help established medium-sized firms (often family businesses) grow and restructure. Focuses on how financial, legal, and economic issues are dealt with in the financial contracts between venture capitalists and their limited partners and between capitalists (or other private equity investors) and the firms in which they invest.

Restricted to BMGT majors with 72 credit hours completed and Innovation and Entrepreneurship minors.

0101	Donald Baker	Seats (Total: 40)
	MW 5:00pm - 6:15pm	VMH 1335

BMGT366 Growth Strategies for Emerging Companies

Credits: 3 Grading Method: Regular

Prerequisite: BMGT461 or BMGT361. Restriction: Junior standing or higher.

Offers practical management tools that are needed to build a new venture into a significant enterprise. The competencies, strategies and structures of successful high performance businesses are studied through cases, videos and guest lecturers. Topics include leadership, internal growth strategies, merger, acquisition and franchising.

Restricted to Innovation and Entrepreneurship Minors and Management Majors.

0101	David Kirsch TuTh 9:30am - 10:45am	Seats (Total: 45) TYD 2110
SG91	Oliver Schlake TuTh 12:30pm - 1:45pm <i>Shady Grove senior Management (0503G) majors.</i>	Seats (Total: 45) BLD2 3052

BMGT367

Career Search Strategies in Business

Credits: 1 Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

An overview and opportunity to practice job search skills critical to obtaining internships and full-time positions. Course will cover strategies for exploring career options, preparing job search materials, development of job search skills such as interviewing and networking. Students are encouraged to take this course in the sophomore or junior year.

0101	Michelle Morrison, Erin Saddler M 5:00pm - 5:50pm <i>Restricted to BMGT students with 45 credit hours completed.</i>	Seats (Total: 45) VMH 1212
0201	Erin Saddler, Susan Powell Tu 5:00pm - 5:50pm <i>Restricted to BMGT students with 45 credit hours completed.</i>	Seats (Total: 45) VMH 1335
0301	Dina Broydo, Erin Saddler W 5:00pm - 5:50pm <i>Restricted to BMGT students with 45 credit hours completed.</i>	Seats (Total: 45) VMH 1212
0401	Erin Saddler, Meghan Houston M 6:00pm - 6:50pm <i>Restricted to BMGT students with 45 credit hours completed.</i>	Seats (Total: 45) VMH 1212

0501	Linda Bowers, Erin Saddler W 5:00pm - 5:50pm <i>Restricted to BMGT students with 45 credit hours completed.</i>	Seats (Total: 45) VMH 1206
SG91	Erin Saddler, Sadie Edmonds W 5:00pm - 5:50pm <i>Restricted to BMGT-Shady Grove Junior Entrepreneurship, International Business & Marketing Majors. Other students may request enrollment on a space available basis. UMCP undergraduate students are not eligible to enroll at Shady Grove.</i>	Seats (Total: 80) BLD2 3032
SG92	Erin Saddler, Michael Poerksen W 5:00pm - 5:50pm <i>Restricted to BMGT-Shady Grove Junior Accounting Majors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>	Seats (Total: 45) BLD2 3052
SG93	Rachel Cotton, Erin Saddler W 5:00pm - 5:50pm <i>Restricted to BMGT-Shady Grove Junior Entrepreneurship, International Business and Marketing Majors. Other students may request enrollment on a space available basis. UMCP undergraduate students are not eligible to enroll at Shady Grove.</i>	Seats (Total: 45) BLD2 2062

BMGT370

Introduction to Transportation

Credits: 3 Grading Method: Regular

An overview of the transportation field with an emphasis on freight movements from the perspective of both providers of capacity and users of freight services. Examines the characteristics of the freight modes and the role of each mode as a major component of logistics and supply chain management. Explores the economics, energy use, and finances of each mode as well as the impact of government policies on each mode's future. Discussion of infrastructure and capacity needs of the transportation system and its ability to support the economy.

Restricted to BMGT majors with 53 credit hours completed.

0101	Leland Gardner TuTh 8:00am - 9:15am	Seats (Total: 45) VMH 1206
0201	Leland Gardner TuTh 9:30am - 10:45am	Seats (Total: 45) VMH 1206

BMGT372

Introduction to Logistics and Supply Chain Management

Credits: 3 Grading Method: Regular

Supply chain management involves the coordination of suppliers, manufacturers, distributors, and retailers to ensure that products and services are available to the final consumer in a timely and cost-effective fashion. Logistics management is the subset of supply chain management dealing with the physical flows of product and includes such activities as transportation management, warehousing, materials handling, inventory management, and order fulfillment. Attention is paid to the logistics cost trade-offs within the firm and between members of the supply chain.

Restricted to BMGT majors with 53 credit hours completed.

0101	Niratcha Tungtisanont TuTh 11:00am - 12:15pm	Seats (Total: 38) VMH 1518
0201	Niratcha Tungtisanont TuTh 12:30pm - 1:45pm	Seats (Total: 38) VMH 1518
0301	Leland Gardner MW 11:00am - 12:15pm	Seats (Total: 45) VMH 1418
0401	Niratcha Tungtisanont TuTh 2:00pm - 3:15pm	Seats (Total: 38) VMH 1518

BMGT372M Introduction to Logistics and Supply Chain Management

Credits: 3 Grading Method: Regular

Supply chain management involves the coordination of suppliers, manufacturers, distributors, and retailers to ensure that products and services are available to the final consumer in a timely and cost-effective fashion. Logistics management is the subset of supply chain management dealing with the physical flows of product and includes such activities as transportation management, warehousing, materials handling, inventory management, and order fulfillment. Attention is paid to the logistics cost trade-offs within the firm and between members of the supply chain.

Restricted to General Business Minors.

0101	Hugh Turner Tu 2:00pm - 3:15pm Class time/details on ELMs	Seats (Total: 100) TWS 0320 ONLINE
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BMGT380 Business Law I

Credits: 3 Grading Method: Regular

Legal aspects of business relationships. Examination of torts and business crimes, contracts and agency. The law of personal property and bailment relationships. Survey of public policy issues.

0101	T Anenson MW 12:30pm - 1:45pm <i>Restricted to BMGT majors with 53 credit hours completed. Other interested students should review their eligibility for BMGT 380N.</i>	Seats (Total: 49) VMH 1412
0201	T Anenson MW 3:30pm - 4:45pm <i>Restricted to BMGT majors with 53 credit hours completed. Other interested students should review their eligibility for BMGT 380N.</i>	Seats (Total: 55) VMH 1520
0301	T Anenson MW 5:00pm - 6:15pm <i>Restricted to BMGT majors with 53 credit hours completed. Other interested students should review their eligibility for BMGT 380N.</i>	Seats (Total: 55) VMH 1520
0401	Jennifer Gershberg TuTh 9:30am - 10:45am <i>Restricted to BMGT majors with 53 credit hours completed. Other interested students should review their eligibility for BMGT 380N.</i>	Seats (Total: 55) VMH 1412
0501	Jennifer Gershberg TuTh 11:00am - 12:15pm <i>Restricted to BMGT majors with 53 credit hours completed. Other interested students should review their eligibility for BMGT 380N.</i>	Seats (Total: 55) VMH 1412
0601	Jennifer Gershberg TuTh 2:00pm - 3:15pm <i>Restricted to BMGT majors with 53 credit hours completed. Other interested students should review their eligibility for BMGT 380N.</i>	Seats (Total: 55) VMH 1412
0701	Justin Reyna W 7:00pm - 9:40pm <i>Restricted to BMGT majors with 53 credit hours completed. Other interested students should review their eligibility for BMGT 380N.</i>	Seats (Total: 55) VMH 1303
SG91	Justin Reyna MW 9:30am - 10:45am <i>Restricted to BMGT-shady Grove Seniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>	Seats (Total: 60) BLD3 3230

SG92	Justin Reyna	Seats (Total: 60)
	MW 11:00am - 12:15pm	BLD3 3230
<i>Restricted to BMGT-Shady Grove Seniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>		

BMGT380N Business Law I

Credits: 3 Grading Method: Regular

Legal aspects of business relationships. Examination of torts and business crimes, contracts and agency. The law of personal property and bailment relationships. Survey of public policy issues.

Restricted to agricultural and resource economics majors (0111C) with 53 credit hours completed.

0101	T Anenson	Seats (Total: 6)
	MW 12:30pm - 1:45pm	VMH 1412

BMGT382 Marketing and Innovation for Entrepreneurs

Credits: 3 Grading Method: Regular

Restriction: Must not have completed BMGT352. Credit only granted for: BMGT352 or BMGT382. Additional information: Course will not satisfy a Marketing major requirement.

Marketing and Innovation are two critically important activities that determine success in any business venture. This course will focus on understanding the fundamentals of marketing and innovation from the perspective of an entrepreneur. At a broad level, we will apply proven marketing frameworks (STP and 4Ps) to effectively deliver innovation in an entrepreneurial context.

0101	Yogesh Joshi	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	VMH 1212
<i>Restricted to Innovation and Entrepreneurship Minors.</i>		
SG91	Mary Beth Furst	Seats (Total: 45)
	TuTh 9:30am - 10:45am	BLD2 3032
<i>Restricted to Junior BMGT-Shady Grove students majoring in Marketing. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>		

BMGT385 Operations Management

Credits: 3 Grading Method: Regular

Credit only granted for: BMGT385 or ENME426.

Studies the design, management and improvement of a firm's processes and systems for creation and delivery of products and services. Includes strategic and operational views of supply chain, product development, and capacity analysis, highlighting the competitive advantages that operations management can provide the firm.

Restricted to BMGT majors and QUEST program students with 53 credit hours completed and to Business Process Fellows.

0101	Kazim Ruhi	Seats (Total: 45)
	TuTh 11:00am - 12:15pm	VMH 1520
0201	Kazim Ruhi	Seats (Total: 45)
	TuTh 12:30pm - 1:45pm	VMH 1520

BMGT390H Designing Innovative Systems

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENES190 or BMGT190. Restriction: Must be in the QUEST program. Cross-listed with ENES390. Credit only granted for: BMGT390 or ENES390.

QUEST students develop an understanding of complex systems that incorporate elements of business and technical design and analyze how these systems evolve over time and may be shaped by technology disruptions, internal decisions, and external forces. Students apply these concepts to real-world complex systems in a team environment.

Restricted to QUEST program students. Cross-listed with ENES390H.

0101	Joseph Bailey	Seats (Total: 45)
	TuTh 3:30pm - 4:45pm	VMH 1415

BMGT392 Introduction to International Business Management

Credits: 3 Grading Method: Regular

Prerequisite: ECON200.

A study of the domestic and foreign environmental factors affecting the international operations of U.S. business firms. The course also covers the administrative aspects of international marketing, finance and management.

Restricted to BMGT majors with 53 credit hours completed.

0101	Nathan Barrymore MW 2:00pm - 3:15pm	Seats (Total: 30) VMH 1418
0201	Nathan Barrymore MW 3:30pm - 4:45pm	Seats (Total: 30) VMH 1418

BMGT397 Mentoring Multidisciplinary Teams

Credits: 3 Grading Method: Regular

Restriction: Restricted to QUEST Program (TQMP) students. Also offered as: ENES397. Credit only granted for: BMGT397 or ENES397.

QUEST students practice essential skills for mentoring and coaching multidisciplinary teams. These include effective communications, facilitation, conflict resolution, and the ability to motivate. Students will practice these skills as mentors for student teams from BMGT/ENES 190H. In the process, they will strengthen their knowledge of design and quality techniques.

Restricted to QUEST program students. Cross-listed with ENES397.

0101	Pamela Armstrong Tu 5:00pm - 7:40pm	Seats (Total: 9) VMH 1415
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BMGT398 Individual Study in Business and Management

(Perm req)

Credits: 1-3 Grading Method: Regular

Contact department for information to register for this course.

BMGT398A Individual Study in Business and Management; Internship

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Restricted to Smith School of Business students. Interested students should contact Erin Fields Saddler (esaddler@rsmith.umd.edu) for details and permission.

0101	Erin Saddler Contact instructor or department for details.	Seats (Total: 35)
SG91	Erin Saddler Contact instructor or department for details.	Seats (Total: 25)

BMGT398C Individual Study in Business and Management; Undergraduate Teaching Scholars Training

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail

Restricted to Accounting Teaching Scholars (FPTS).

0101	Progyan Basu	Seats (Total: 19)
Contact instructor or department for details.		

BMGT398L

Individual Study in Business and Management; Innovo Consulting Practicum: Innovate Business Processes

(Perm req)

Credits: 3 Grading Method: Regular

Contact department for information to register for this course.

BMGT398T

Individual Study in Business and Management; The External Transfer Student in Smith

(Perm req)

Credits: 1 Grading Method: Regular

Restricted to incoming Fall Smith School External Transfer students only.

0101	Evan Riddle	Seats (Total: 35)
Meets August 26, 2019 - October 17, 2019		
	Tu 5:00pm - 6:35pm	VMH 1336

BMGT402

Database Systems

Credits: 3 Grading Method: Regular

Recommended: BMGT302. Credit only granted for: INST327 or BMGT402.

The fundamentals of database management systems (DBMS), data models, query processing, and data warehouses, and their application in the development of business information systems will be covered. An important goal of this course is to understand the value of information resources and information management challenges within an organization.

Restricted to BMGT majors and Business Analytics minors with 72 credit hours completed.

0101	Mikhail Lysyakov	Seats (Total: 38)
	TuTh 2:00pm - 3:15pm	VMH 2203
	Tu 5:00pm - 5:50pm	VMH 2203 Lab
0201	Vidit Mehta	Seats (Total: 38)
	MW 3:30pm - 4:45pm	VMH 2203
	Tu 6:00pm - 6:50pm	VMH 2203 Lab

0301	Woei-Jyh Lee MW 9:30am - 10:45am Tu 7:00pm - 7:50pm	Seats (Total: 38) VMH 2203 VMH 2203	Lab
0401	Woei-Jyh Lee MW 8:00am - 9:15am Tu 8:00pm - 8:50pm	Seats (Total: 38) VMH 2203 VMH 2203	Lab
0501	John Bono TuTh 8:00am - 9:15am Th 5:00pm - 5:50pm	Seats (Total: 26) VMH 2203 VMH 3522	Lab

BMGT403

Systems Analysis and Design

Credits: 3 Grading Method: Regular

Prerequisite: BMGT301; or students who have taken courses with comparable content may contact the department. Recommended: BMGT302.

Techniques and tools applicable to the analysis and design of computer-based information systems. System life cycle, requirements analysis, logical design of databases and performance evaluation. Emphasis on case studies. Project required that involves the design, analysis and implementation of an information system.

Restricted to Information System students with 72 credits.

0101	Hassan Ibrahim MW 11:00am - 12:15pm	Seats (Total: 40) VMH 2203	
0201	Hassan Ibrahim Tu 7:00pm - 9:40pm	Seats (Total: 26) VMH 3522	
0301	Hassan Ibrahim MW 12:30pm - 1:45pm	Seats (Total: 40) VMH 2203	
0401	Hassan Ibrahim M 7:00pm - 9:40pm	Seats (Total: 40) VMH 2203	
0501	Paul Shapiro Th 7:00pm - 9:40pm	Seats (Total: 40) VMH 1307	

BMGT406

Developing Applications for the Web and Social Media

Credits: 3 Grading Method: Regular

Prerequisite: BMGT402 and BMGT302. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business. Credit only granted for: INST377 or BMGT406.

The design and development of Web applications and the underlying platforms and standards for Web application development will be covered. It will examine the phenomenon of social media, social networking and crowdsourcing and understand their use within organizations.

Restricted to BMGT majors with 72 credit hours completed.

0101	Louisa Raschid	Seats (Total: 25)
	MW 5:00pm - 6:50pm	VMH 2203

BMGT407 Information Systems Projects

Credits: 3 Grading Method: Regular

Prerequisite: BMGT402 and BMGT403. Restriction: Senior standing.

Senior capstone course for the decision and information sciences major. Collected knowledge from the DIS courses and application to significant problems of size and complexity. State-of-the-art research ideas and current business and industrial practices in information systems.

Restricted to Information Systems majors with 86 credit hours completed.

0101	Hassan Ibrahim	Seats (Total: 35)
	MW 2:00pm - 3:15pm	VMH 2203
0201	Hassan Ibrahim	Seats (Total: 35)
	W 7:00pm - 9:40pm	VMH 2203

BMGT408E Emerging Topics in Information Systems; Big Data and Artificial Intelligence for Business

Credits: 3 Grading Method: Regular

Selected advanced topics covering emerging developments in the field of decision and information technologies.

Prerequisite: BMGT402. Restricted to BMGT majors with 72 credit hours completed. This course requires a relatively powerful laptop with at least 8 GB of memory and 30 GB of free space on hard drive.

0101	Guodong Gao	Seats (Total: 30)
	MW 12:30pm - 1:45pm	VMH 1311

BMGT411**Ethics and Professionalism in Accounting**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT311. Restriction: Must be in Accounting program.

Analysis and discussion of issues relating to ethics and professionalism in accounting.

Restricted to Accounting majors with 86 credit hours completed.

0101	Sandra Rose MW 11:00am - 12:15pm	Seats (Total: 35) VMH 1307
0201	Jeffrey Milton MW 12:30pm - 1:45pm	Seats (Total: 35) VMH 1307
0301	Jeffrey Milton MW 2:00pm - 3:15pm	Seats (Total: 35) VMH 1307

BMGT417**Taxation of Corporations, Partnerships and Estates**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT221.

Federal taxation of corporations using the life-cycle approach-formation, operation, assessment, merger, reorganization and liquidation. Overviews of pass-through entities - partnerships and s-corporations -using the life-cycle approach, and the tax consequences of wealth transfers by individuals - gift and estate taxation. Both tax planning and compliance issues are addressed.

Restricted to Accounting majors with 84 credit hours completed.

0101	Alexander Ruygrok MW 5:00pm - 6:15pm	Seats (Total: 40) VMH 1307
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BMGT422**Auditing Theory and Practice**

Credits: 3 Grading Method: Regular

Prerequisite: BMGT310; and must have completed or be concurrently enrolled in BMGT311.

A study of the independent accountant's attest function, generally accepted auditing standards, compliance and substantive tests and report forms and opinions.

0101	James McKinney MW 9:30am - 10:45am <i>Restricted to Accounting majors.</i>	Seats (Total: 35) VMH 1314
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0201	James McKinney MW 11:00am - 12:15pm <i>Restricted to Accounting majors.</i>	Seats (Total: 35) VMH 1314
0301	Mary Keim MW 12:30pm - 1:45pm <i>Restricted to Accounting majors.</i>	Seats (Total: 35) VMH 1314
SG91	Mary Keim TuTh 12:30pm - 1:45pm <i>Restricted to BMGT-Shady Grove Seniors majoring in Accounting.</i>	Seats (Total: 30) BLD2 3012
SG92	Mary Keim TuTh 11:00am - 12:15pm <i>Restricted to BMGT-Shady Grove Seniors majoring in Accounting.</i>	Seats (Total: 30) BLD2 3012

BMGT430

Data Modeling in Business

Credits: 3 Grading Method: Regular

Prerequisite: BMGT231 or BMGT230; or permission of BMGT-Robert H. Smith School of Business.

Explores the role of statistical models in business analytics to drive managerial decision-making and improve performance through the use of relevant data-motivated examples. Topics include regression models (both simple and multiple regression, as well as logistic regression for binary data), model validation, variable transformation, variable selection, discriminant analysis, and forecasting. These topics are modeled using state-of-the-art data analytics software.

Restricted to BMGT majors with 72 credit hours completed or students in the Business Analytics minor.

0101	Radu Lazar MW 9:30am - 10:45am	Seats (Total: 50) VMH 1336
0201	Radu Lazar MW 11:00am - 12:15pm	Seats (Total: 50) VMH 1336
0301	Radu Lazar MW 12:30pm - 1:45pm	Seats (Total: 50) VMH 1336

BMGT431

Data Analytics

Credits: 3 Grading Method: Regular

Prerequisite: BMGT430.

An introduction to the tools and techniques that are central to the analysis of abundant data that is being collected in many forms including web traffic, social network data, and reviews and comments on websites.

Restricted to Business Analytics minors or OM majors.

0101	Radu Lazar TuTh 2:00pm - 3:15pm	Seats (Total: 45) VMH 1411
0201	Radu Lazar TuTh 12:30pm - 1:45pm	Seats (Total: 45) VMH 1418

BMGT434 Analytics Consulting: Cases and Projects

Credits: 3 Grading Method: Regular

Prerequisite: BMGT332; and (MATH120 or MATH140; or must have completed MATH220). Or students who have taken courses with comparable content may contact the department. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

This course assumes that students have already been introduced to the concepts and techniques of operations research/business analytics (OR/BA). Published papers, short cases, and projects in OR/BA will be analyzed and discussed in a thoughtful way, taking into account the soft (people-related) issues and the hard (mathematical/optimization) issues.

Restricted to BMGT majors, QUEST students, and Business Analytics minors with 72 credit hours completed.

0101	Pamela Armstrong MW 2:00pm - 3:15pm	Seats (Total: 45) VMH 1336
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BMGT435 Business Process Simulation

Credits: 3 Grading Method: Regular

Prerequisite: BMGT231 or BMGT230; or students who have taken courses with comparable content may contact the department. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

Develop and plan simulation studies, build simulation models with special purpose software, analyze and interpret the results. Extensive use of applications and real-world examples. The emphasis is on model formulation and the interpretation of results, rather than mathematical theory.

Restricted to BMGT majors or Business Analytics minors with 60 credits completed.

0101	Sujin Kim	Seats (Total: 45)
	TuTh 9:30am - 10:45am	VMH 1411

BMGT438A Special Topics in Operations Management; Applied Quantitative Analysis

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Selected advanced topics in operations management.

Course restricted to QUEST students. Cross-listed with ENES489A. Credit granted for BMGT438A or ENES489A.

0101	Joshua Kohn, David Ashley	Seats (Total: 40)
	M 5:00pm - 7:40pm	VMH 1415

BMGT440 Advanced Financial Management

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340.

Analysis and discussion of cases and readings relating to financial decisions of the firm. The application of finance concepts to the solution of financial problems is emphasized.

Restricted to BMGT majors with 68 credit hours completed.

0101	Elinda Kiss	Seats (Total: 48)
	MW 9:30am - 10:45am	VMH 1335
0201	David Kass	Seats (Total: 48)
	TuTh 2:00pm - 3:15pm	VMH 1335
0301	David Kass	Seats (Total: 48)
	TuTh 3:30pm - 4:45pm	VMH 1335
0401	Elinda Kiss	Seats (Total: 48)
	MW 11:00am - 12:15pm	VMH 1335
0501	David Kass	Seats (Total: 48)
	TuTh 11:00am - 12:15pm	VMH 1335

BMGT441 Fixed Income

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340. Credit only granted for: BMGT448A or BMGT441. Formerly: BMGT448A.

Describes important financial instruments which have market values that are sensitive to interest rate movements. Develops tools to analyze interest rate sensitivity and value fixed income securities. Defines and explains the vocabulary of the bond management business.

Restricted to Finance majors with 72 credit hours completed.

0101	Aysun Alp Paukowits MW 9:30am - 10:45am	Seats (Total: 45) VMH 1415
0201	Aysun Alp Paukowits MW 8:00am - 9:15am	Seats (Total: 45) VMH 1415

BMGT443 Applied Equity Analysis and Portfolio Management

Credits: 3 Grading Method: Regular

Prerequisite: BMGT343.

Study and application of the concepts, methods, models, and empirical findings to the analysis, valuation and selection of securities, especially common stock.

Restricted to BMGT majors with 84 credit hours completed.

0101	Joseph Perfetti MW 11:00am - 12:15pm	Seats (Total: 45) VMH 3505
0201	Joseph Perfetti MW 2:00pm - 3:15pm	Seats (Total: 45) VMH 3505
0301	Joseph Perfetti MW 3:30pm - 4:45pm	Seats (Total: 45) VMH 3505
0401	Joseph Perfetti MW 12:30pm - 1:45pm	Seats (Total: 45) VMH 3505

BMGT444 Futures and Options Contracts

Credits: 3 Grading Method: Regular

Prerequisite: BMGT343. Credit only granted for: BMGT444 or MATH424.

The institutional features and economic rationale underlying markets in futures and options. Hedging, speculation, structure of futures prices, interest rate futures, efficiency in futures markets and stock and commodity options.

Restricted to Finance majors with 84 credit hours completed.

0101	Albert Crosby	Seats (Total: 45)
	M 7:00pm - 9:40pm	VMH 1520

BMGT445 Banking and Financial Institutions

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340. Recommended: ECON330 or BMGT341.

Analysis and discussion of cases and readings in commercial bank management. The loan function is emphasized; also the management of liquidity reserves, investments for income and source of funds. Bank objectives, functions, policies, organization, structure, services and regulation are considered.

Restricted to Finance majors with 84 credit hours completed.

0101	Michael Padhi	Seats (Total: 48)
	MW 12:30pm - 1:45pm	VMH 1335
0201	Elinda Kiss	Seats (Total: 48)
	MW 3:30pm - 4:45pm	VMH 1335

BMGT445F Banking and Financial Institutions

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BMGT340. Recommended: ECON330 or BMGT341.

Analysis and discussion of cases and readings in commercial bank management. The loan function is emphasized; also the management of liquidity reserves, investments for income and source of funds. Bank objectives, functions, policies, organization, structure, services and regulation are considered.

Restriction: restricted to Banking and Private Wealth Management Fellows (code FPFS).

FP01	Elinda Kiss	Seats (Total: 35)
	MW 2:00pm - 3:15pm	VMH 1335

BMGT446 International Finance

Credits: 3 Grading Method: Regular

Prerequisite: BMGT340.

Financial management from the perspective of the multinational corporation. Topics covered include the organization and functions of foreign exchange and international capital markets, international capital budgeting, financing foreign trade and designing a global financing strategy. Emphasis of the course is on how to manage exchange and political risks while maximizing benefits from global opportunity sets faced by the firm.

Restricted to Finance and International Business majors with 72 credit hours completed.

0101	Albert Crosby	Seats (Total: 45)
	TuTh 9:30am - 10:45am	VMH 1335
0201	Albert Crosby	Seats (Total: 45)
	Th 7:00pm - 9:40pm	VMH 1206
0301	Mark Flood	Seats (Total: 45)
	TuTh 12:30pm - 1:45pm	VMH 1335

BMGT448G Special Topics in Finance; Quantitative Financial Analysis

Credits: 3 Grading Method: Regular

Selected advanced topics in finance.

Prerequisite: BMGT230 and BMGT340. Pre-or Co-requisite: BMGT343. Restricted to Quantitative Finance Fellows.

FP01	Bingkuan Cao	Seats (Total: 35)
	MW 9:30am - 10:45am	VMH 3505

BMGT448L Special Topics in Finance; Hedge Fund Management

Credits: 3 Grading Method: Regular

Selected advanced topics in finance.

Prerequisite: BMGT340. Restricted to Finance majors with 72 credit hours completed.

0101	Kenneth Brodkowitz	Seats (Total: 45)
	TuTh 11:00am - 12:15pm	VMH 3505

BMGT449F Investment Fund Management: Lemma Senbet Fund

Credits: 3 Grading Method: Regular

The Lemma Senbet Fund is a year-long, advanced finance course available to undergraduate finance majors in their senior year. Ten to twelve students will be selected in the spring of their junior year to participate on the fund, two as portfolio managers and eight to ten as equity analysts. The course provides students with the opportunity to apply what they have learned in finance classes to actual investment decisions, through researching real companies and managing a portfolio of real money.

Restricted to Lemma Senbet Fund Fellows (FPSF).

FP01	Sarah Kroncke	Seats (Total: 12)
	MW 10:00am - 11:50am	VMH 2509

BMGT450 Integrated Marketing Communications

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business. Credit only granted for: BMGT354 or BMGT450. Formerly: BMGT354.

In-depth study of coordinated marketing activities including advertising, sales promotion, Internet marketing, direct marketing and personal selling. Emphasizes strategic planning to effectively use these promotional tools to communicate with customers and meet marketing goals. Blends theory and current practice to provide managerial orientation.

Restricted to Shady Grove seniors and Junior IB majors.

SG91	Marjorie Bonavia	Seats (Total: 45)
	TuTh 9:30am - 10:45am	BLD2 2062

BMGT451 Consumer Analysis

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350. Recommended: PSYC100; and PSYC221.

Identifying buyer behavior concepts relevant to a specific marketing problem so that appropriate marketing decisions can be made. Conceptual frameworks are drawn from psychology, sociology, economics, and other social sciences to aid in understanding the behavior of ultimate and industrial buyers.

Restricted to Marketing majors with 68 credit hours completed.

0101	Yajin Wang	Seats (Total: 45)
	MW 12:30pm - 1:45pm	VMH 1415
0201	Yajin Wang	Seats (Total: 45)
	MW 2:00pm - 3:15pm	VMH 1415

0301	Yajin Wang	Seats (Total: 45)
	MW 11:00am - 12:15pm	VMH 1415

BMGT452 Marketing Research Methods

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350 and BMGT230.

Focuses on aiding marketing decision-making through exploratory, descriptive and casual research. Develops student skills in designing market research studies, including selection of data collection method, development of data collection instrument, sample design, collection and statistical analysis of data and reporting the results.

0101	Bo Zhou	Seats (Total: 38)
	TuTh 2:00pm - 3:15pm	VMH 1415
<i>Restricted to Marketing majors with 72 credit hours completed.</i>		
0201	Richard Toohey	Seats (Total: 38)
	TuTh 3:30pm - 4:45pm	VMH 1411
<i>Restricted to Marketing majors with 72 credit hours completed.</i>		
0301	Lingling Zhang	Seats (Total: 38)
	TuTh 9:30am - 10:45am	VMH 1518
<i>Restricted to Marketing majors with 72 credit hours completed.</i>		
SG91	Richard Toohey	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	BLD2 3062
<i>Restricted to BMGT-Shady Grove Seniors majoring in Marketing. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>		

BMGT454 Global Marketing

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350.

Marketing functions from the global executive's viewpoint, including coverage of global marketing policies relating to product adaptation, data collection and analysis, channels of distribution, pricing, communications and cost analysis. Consideration is given to the cultural, legal, financial and organizational aspects of global marketing.

Restricted to BMGT majors with 72 credit hours completed.

0101	Amna Khawaja	Seats (Total: 45)
	TuTh 11:00am - 12:15pm	VMH 1206

BMGT457 Marketing Policies and Strategies

Credits: 3 Grading Method: Regular CORE: CS

Prerequisite: BMGT350.

This capstone course ties together various marketing concepts using the fundamentals of strategic market planning as the framework. Application of these principles is accomplished by analyzing and discussing cases and by playing a marketing strategy computer simulation game. Analysis of current business articles to understand the link between theory and real-world problem solving.

Restricted to Marketing majors with 100 credit hours completed.

0101	Mary Harms	Seats (Total: 38)
	TuTh 11:00am - 12:15pm	VMH 1307
0201	Mary Harms	Seats (Total: 38)
	TuTh 12:30pm - 1:45pm	VMH 1307

BMGT458A Special Topics in Marketing; Design and Innovation in Marketing

(Perm req)

Credits: 3 Grading Method: Regular

Selected advanced topics in marketing.

FP01	Mary Harms	Seats (Total: 36)
	TuTh 5:00pm - 6:15pm	VMH 1418
<i>Restricted to students in the Strategic Design and Innovation Fellows program.</i>		

BMGT458B Special Topics in Marketing; Design Applications in Marketing and Branding

(Perm req)

Credits: 3 Grading Method: Regular

Selected advanced topics in marketing.

FP01	Howard Bomstein	Seats (Total: 35)
	M 7:00pm - 9:40pm	VMH 1307
<i>Restricted to students in the Strategic Design and Innovation Fellows program.</i>		

BMGT458Q Special Topics in Marketing; Computer Graphics Workshop

Credits: 3 Grading Method: Regular

Selected advanced topics in marketing.

FP01	Kelly Driver	Seats (Total: 26)
	W 7:00pm - 9:40pm	ATL 1410
<i>Restricted to students in the Strategic Design and Innovation Fellows program.</i>		

BMGT458R Special Topics in Marketing; Advanced Computer Graphics Workshop

Credits: 3 Grading Method: Regular

Selected advanced topics in marketing.

Restricted to students in the Strategic Design and Innovation Fellows program.

FP01	Kelly Driver	Seats (Total: 20)
	W 4:00pm - 6:40pm	ATL 1410

BMGT461 Entrepreneurship

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Must not have completed BMGT361. Credit only granted for: BMGT261, BMGT361, BMGT461, ENES460 or HLMN470.

Process of creating new ventures, including evaluating the entrepreneurial team, the opportunity and the financing requirements. Skills, concepts, mental attitudes and knowledge relevant for starting a new business.

0101	Maurice Boissiere	Seats (Total: 20)
	Tu 7:00pm - 9:40pm	VMH 1206
<i>Restricted to BMGT majors with 72 credit hours completed. Non-majors should register for BMGT 461N.</i>		
SG91	Oliver Schlake	Seats (Total: 45)
	Th 2:00pm - 4:40pm	BLD2 3052
<i>Restricted to BMGT-Shady Grove students majoring in Accounting, International Business or Marketing. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>		

BMGT461M Entrepreneurship

Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Must not have completed BMGT361. Credit only granted for: BMGT261, BMGT361, BMGT461, ENES460 or HLMN470.

Process of creating new ventures, including evaluating the entrepreneurial team, the opportunity and the financing requirements. Skills, concepts, mental attitudes and knowledge relevant for starting a new business.

Restricted to Innovation and Entrepreneurship Minors.

0101	Brent Goldfarb	Seats (Total: 60)
	TuTh 12:30pm - 1:45pm	TWS 0320
	Class time/details on ELMs	ONLINE

BMGT461N Entrepreneurship

Credits: 3

Grading Method: Regular

General Education: DSSP

Restriction: Must not have completed BMGT361. Credit only granted for: BMGT261, BMGT361, BMGT461, ENES460 or HLMN470.

Process of creating new ventures, including evaluating the entrepreneurial team, the opportunity and the financing requirements. Skills, concepts, mental attitudes and knowledge relevant for starting a new business.

Open to all non-BMGT majors with 72 credit hours completed. BMGT majors should register for BMGT 461.

0101	Maurice Boissiere	Seats (Total: 20)
	Tu 7:00pm - 9:40pm	VMH 1206

BMGT463 Cross-cultural Challenges in Business

Credits: 3

Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

Examines in depth the nature of international cultural value-differences and their behavioral-related effects in the workplace. Topics include decision-making and leadership styles and reactions to various work assignments and reward structures.

0101	Debra Shapiro	Seats (Total: 45)
	MW 2:00pm - 3:15pm	VMH 1206
	<i>Restricted to International Business & Mgmt majors with 72 credits.</i>	

BMGT466 Global Business Strategy

Credits: 3 Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

Focuses on the strategic challenges that directly result from and are associated with the globalization of industries and companies. Topics include drivers of industry globalization, difference between global and multi-domestic industry, global expansion strategies, sources of competitive advantage in a global context, and coordination of a company across a global network.

Restricted to International Business majors and Management majors with 72 credit hours completed.

0101	Mark Wellman	Seats (Total: 45)
	Th 3:30pm - 6:10pm	ESJ 1215

BMGT466F Global Business Strategy

Credits: 3 Grading Method: Regular

Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

Focuses on the strategic challenges that directly result from and are associated with the globalization of industries and companies. Topics include drivers of industry globalization, difference between global and multi-domestic industry, global expansion strategies, sources of competitive advantage in a global context, and coordination of a company across a global network.

Restricted to Global Fellows students only.

FP01	Mark Wellman	Seats (Total: 35)
	Th 6:30pm - 9:10pm	ESJ 1215

BMGT467 Strategic Innovation and Entrepreneurship

Credits: 3 Grading Method: Regular

Credit only granted for: BMGT467, ENES463 or HLMN472.

Provides an understanding of how innovation affects the competitive dynamics of markets, how firms can strategically manage innovation, and how firms can create and implement strategies to maximize their likelihood of success.

Restricted to Innovation and Entrepreneurship Minors.

0101	Clarence Wesley	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	SQH 1105

BMGT468V Special Topics in Management and Organization; Business Models and Methods to Affect Social Change

Credits: 3 Grading Method: Regular

Selected advanced topics in management and organization.

Restricted to Social Innovation Fellows.

FP01	David Kirsch	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	VMH 1314
<i>Restricted to students in the Social Innovation Fellows program.</i>		

BMGT468Y Special Topics in Management and Organization; Entrepreneurial Capitalism Around the World

Credits: 3 Grading Method: Regular

Selected advanced topics in management and organization.

Restricted to students with 60 credit hours completed.

0101	Serguey Braguinsky	Seats (Total: 45)
	MW 9:30am - 10:45am	ESJ 2309

BMGT468Z Special Topics in Management and Organization; Create the Future through Systems Thinking and Design

Credits: 3 Grading Method: Regular

Selected advanced topics in management and organization.

Restricted to students with 60 credit hours completed.

0101	Gerald Suarez	Seats (Total: 35)
	MW 11:00am - 12:15pm	ESJ B0320

BMGT471F Seminar in Supply Chain Management: An Executive Perspective

Credits: 3 Grading Method: Regular

Prerequisite: BMGT372. Formerly: BMGT488L and BMGT498L.

Designed to provide students intensive interaction with senior supply chain executives from a cross-section of industries. Executives will share their insights about leading competitive supply chains in the global marketplace and assist students in understanding how to develop supply chain career strategies. Students will research the competitive supply chain dynamics of each executive's industry and review/analyze their findings with the executive.

Restricted to Supply Chain Management Fellows (FPLT).

FP01	Thomas Corsi	Seats (Total: 35)
	W 6:30pm - 9:10pm	VMH 1412

BMGT472 Purchasing and Inbound Logistics

Credits: 3 Grading Method: Regular

Prerequisite: BMGT372.

Analysis of the resupply activities of logistics management, including purchasing policies, transportation planning, and inventory control. Attention is directed toward total cost minimization and the establishment of a sustainable competitive advantage based on procurement.

Restricted to Supply Chain Management majors only.

0101	Hao Su	Seats (Total: 35)
	MW 9:30am - 10:45am	VMH 1418

BMGT476 Technology Applications in Supply Chain Management

Credits: 3 Grading Method: Regular

Prerequisite: BMGT372.

An understanding of the role of technology in managing the supply chain. Provides students with hands-on experience in advanced software systems that build on top of enterprise resource planning systems. Major emphasis is placed on demonstrating that these systems result in supply chain cost reductions and service improvements.

Restricted to SCM and Information Systems majors.

0101	Hongyi Zhang	Seats (Total: 24)
	TuTh 9:30am - 10:45am	VMH 3522
0201	Hongyi Zhang	Seats (Total: 24)
	TuTh 11:00am - 12:15pm	VMH 3522

BMGT477 International Supply Chain Management

Credits: 3 Grading Method: Regular

The study of the importance of the supply chain management within a global context. Topics covered include: the structure, service, pricing and competitive relationships among international carriers and transport intermediaries as well as documentation, location decisions, international sourcing/distribution and management of inventory throughout the international supply chain.

Restricted to SCM majors and International Business majors.

0101	Martin Dresner MW 12:30pm - 1:45pm	Seats (Total: 40) VMH 1418
0201	Adams Steven TuTh 3:30pm - 4:45pm	Seats (Total: 40) VMH 1206
0301	Adams Steven TuTh 5:00pm - 6:15pm	Seats (Total: 40) VMH 1206

BMGT478C Special Topics in Supply Chain Management; Supply Chain Risk Management

Credits: 3 Grading Method: Regular

Selected advanced topics in supply chain management.

Restricted to Supply Chain Management majors.

0101	Leland Gardner MW 8:00am - 9:15am	Seats (Total: 35) VMH 1336
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BMGT484 Digital Marketing

Credits: 3 Grading Method: Regular

Prerequisite: BMGT350. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

Examines the process of developing, implementing, and analyzing strategies for successfully marketing a variety of existing and potential products and services through digital means, including the web, social media, and mobile apps. Both the development and analysis of digital media for marketing will be discussed.

Restricted to BMGT majors with 60 credit hours completed.

0101	Michael Trusov TuTh 2:00pm - 3:15pm	Seats (Total: 45) VMH 3505
0201	Michael Trusov TuTh 3:30pm - 4:45pm	Seats (Total: 45) VMH 3505

BMGT485 Project Management

Credits: 3 Grading Method: Regular

Prerequisite: BMGT231 or BMGT230; or students who have taken courses with comparable content may contact the department. Restriction: Must be in a major in BMGT-Robert H. Smith School of Business.

Modern project management techniques that are used by modern practicing professionals will be covered. Particular attention is given to the management of technology based systems and projects in a business enterprise. The topics covered include: defining project scope, alignment of projects with enterprise strategy, managing project cost, time and risks using tools such as CPM/PERT, and measuring project performance.

Restricted to BMGT and QUEST students with 72 credits completed.

0101	Paul Shapiro	Seats (Total: 45)
	MW 3:30pm - 4:45pm	VMH 1336

BMGT490H QUEST Capstone Professional Practicum

Credits: 4

Grading Method: Regular

General Education: DSSP

Prerequisite: ENES390 or BMGT390. Cross-listed with ENES490. Credit only granted for: BMGT490 or ENES490.

The capstone course for the QUEST Honors Program provides students with an opportunity to learn in multidisciplinary teams of business, engineering, and science students in a real-world setting. Companies engage teams of QUEST students with real organizational challenges and dedicate resources to help students address these problems. Student teams must enhance their skills in quality management, process improvement, and systems design and will apply these to add value to a client. In the process, students will improve their teamwork skills.

Restricted to Quest Program students.

0101	David Ashley, Christina Elson	Seats (Total: 45)
	W 5:00pm - 7:40pm	VMH 1415
	Contact instructor or department for details.	

BMGT491 Scoping Experiential Learning Projects

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: BMGT190 or ENES190. Restriction: Restricted to QUEST Program (TQMP) students. Cross-listed with ENES491. Credit only granted for: BMGT491 or ENES491.

QUEST students cultivate relationships with new and current corporate partners and prepare project scopes for QUEST's introductory course, BMGT/ENES 190H, and capstone course, BMGT/ENES 490H. Requires independent work communicating with clients and class visits to a variety of potential project sites.

Prerequisite: BMGT190H or ENES190H. Restricted to Quest. Cross-listed with ENES491.

0101	Jessica Roffe	Seats (Total: 9)
	F 10:00am - 12:40pm	VMH 1407

BMGT493H Honors Study

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of BMGT-Robert H. Smith School of Business.

First semester of the senior year. The course is designed for honors students who have elected to conduct intensive study (independent or group). The student will work under the direct guidance of a faculty advisor and the Assistant Dean of Undergraduate Studies. They shall determine that the area of study is of a scope and intensity deserving of a candidate's attention. Formal written and/or oral reports on the study may be required by the faculty advisor.

Restricted to BMGT Honors students.

0101	Charles Olson	Seats (Total: 35)
	Th 3:30pm - 6:10pm	VMH 1511

BMGT495 Strategic Management

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A case-based course where students learn to play the role of the "strategic manager" who defines the scope of its business operations and, within the chosen scope, how the firm will compete against rivals. This course focuses on how a firm can both formulate effective business-level and corporate-level strategies to achieve competitive advantage and earn above average profits.

Restricted to BMGT students with 60 credit hours completed.

0101	Mo Chen	Seats (Total: 40)
	MW 9:30am - 10:45am	VMH 1202
0201	Mo Chen	Seats (Total: 40)
	MW 11:00am - 12:15pm	VMH 1202
0301	David Kressler	Seats (Total: 40)
	MW 12:30pm - 1:45pm	VMH 1202
0401	Evan Starr	Seats (Total: 40)
	MW 2:00pm - 3:15pm	VMH 1202

0501	Evan Starr MW 3:30pm - 4:45pm	Seats (Total: 40) VMH 1202
0601	Clarence Wesley MW 5:00pm - 6:15pm	Seats (Total: 40) VMH 1202
0701	Protiti Dastidar TuTh 9:30am - 10:45am	Seats (Total: 40) VMH 1202
0801	Protiti Dastidar TuTh 11:00am - 12:15pm	Seats (Total: 40) VMH 1202
0901	Protiti Dastidar TuTh 12:30pm - 1:45pm	Seats (Total: 40) VMH 1202
1001	David Waguespack TuTh 2:00pm - 3:15pm	Seats (Total: 40) VMH 1202
1101	David Waguespack TuTh 3:30pm - 4:45pm	Seats (Total: 40) VMH 1202

BMGT496
Business Ethics and Society

Credits: 3 Grading Method: Regular

Prerequisite: 1 course in BMGT; or permission of BMGT-Robert H. Smith School of Business.

A study of the standards of business conduct, morals and values as well as the role of business in society with consideration of the sometimes conflicting interests of and claims on the firm and its objectives. Emphasizes a strategic approach by business to the management of its external environment.

Restricted to BMGT-Shady Grove Seniors majoring in Entrepreneurship. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.

SG91	Justin Reyna TuTh 9:30am - 10:45am	Seats (Total: 45) BLD3 3220
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BMGT498L
Special Topics in Business and Management; Innovating the Higher Education Business Model

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics in business and management designed to meet the changing needs and interests of students and faculty.

Innovative Scholars is a new program offering an elite group of students the opportunity to participate in the innovation of teaching and learning at Smith. In addition to completing normal teaching assistant activities, the Scholars will be responsible for designing and implementing improvements to an existing Smith course or program.

0101	Leslie Lindsey, Jonathan Southgate	Seats (Total: 20)
	Th 5:00pm - 6:50pm	VMH 4534
	Contact instructor or department for details.	

BMGT499G Advanced Business Topics; Maryland Social Entrepreneur Corps II

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Course will delve deeply into a specific business topic. Based on experience and knowledge from undergraduate core business classes, students will examine a particular subject from various angles.

Cross-listed with AMST499D. Credit granted for BMGT499G or AMST499D.

Contact department for information to register for this course.

BMGT808G Special Topics in Information Systems; Applied Microeconomics

Credits: 3 Grading Method: Regular,
Audit

Special topics specific to the Information Systems doctoral field of study.

0101	Kislaya Prasad	Seats (Total: 12)
	W 10:00am - 12:40pm	VMH 1326

BMGT808R Special Topics in Information Systems; Research Seminar in Decision, Operations and Information Technologies

Credits: 1 Grading Method: Regular,
Audit

Special topics specific to the Information Systems doctoral field of study.

0101	Sivakumar Viswanathan	Seats (Total: 12)
	Contact instructor or department for details.	

BMGT808V Special Topics in Information Systems; Research in Strategy & Information Systems I

Credits: 2 Grading Method: Regular, Audit

Special topics specific to the Information Systems doctoral field of study.

0101	Peng Huang	Seats (Total: 12)
	Meets August 26, 2019 - October 11, 2019	
	F 2:00pm - 5:35pm	VMH 3332

BMGT818M Special Topics in Accounting and Information Assurance; Financial Accounting

Credits: 3 Grading Method: Regular,
Audit

Special topics specific to the Accounting and Information Assurance doctoral field of study.

0101	Michael Kimbrough	Seats (Total: 10)
	M 10:00am - 2:00pm	VMH 3332

BMGT818N Special Topics in Accounting and Information Assurance; Workshop in Accounting Research

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Accounting and Information Assurance doctoral field of study.

0101	Emanuel Zur	Seats (Total: 10)
	F 10:00am - 10:50am	Location: TBA

BMGT828 Independent Study in Business and Management

Credits: 1-9 Grading Method: Regular
Contact department for information to register for this course.

BMGT830 Operations Research: Linear Programming

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: MATH240; or students who have taken courses with comparable content may contact the department; or permission of BMGT-Robert H. Smith School of Business.

Concepts and applications of linear programming models, theoretical development of the simplex algorithm, and primal-dual problems and theory.

Special topics specific to the Finance doctoral field of study.

0101	Vojislav Maksimovic	Seats (Total: 5)
	Meets October 23, 2019 - November 13, 2019	
	W 3:00pm - 6:00pm	VMH 4534

BMGT848F Special Topics in Finance; Workshop in Finance Research

Credits: 1 Grading Method: Regular,
Audit

Special topics specific to the Finance doctoral field of study.

0101	Pablo Slutzky, Maria Bustamante	Seats (Total: 12)
	F 9:00am - 12:00pm	VMH 1333

BMGT858E Special Topics in Marketing; Experimental Design

Credits: 2 Grading Method: Regular,
Audit

Special topics specific to the Marketing doctoral field of study.

0101	Rosellina Ferraro	Seats (Total: 12)
	Meets October 21, 2019 - December 10, 2019	
	Contact instructor or department for details.	

BMGT858P Special Topics in Marketing; Marketing Models

Credits: 3 Grading Method: Regular,
Audit

Special topics specific to the Marketing doctoral field of study.

0101	Pallassana Kannan	Seats (Total: 12)
	Contact instructor or department for details.	

BMGT858R Special Topics in Marketing; Marketing Research Seminar

Credits: 1 Grading Method: Regular,
Audit

Special topics specific to the Marketing doctoral field of study.

Course restricted to Marketing PhD students only

0101	Ali Faraji-Rad	Seats (Total: 16)
	F 10:00am - 12:30pm	VMH 1303

BMGT868B Special Topics in Organizational Behavior/Human Resource Management; Methods Workshop - Factor Analyses and SEM

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

0101	Gilad Chen	Seats (Total: 12)
	Meets October 21, 2019 - November 4, 2019	
	M 8:30am - 12:40pm	VMH 4534

BMGT868C Special Topics in Organizational Behavior/Human Resource Management

Credits: 1 Grading Method: Regular, Audit

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

0101	Jennifer Marr	Seats (Total: 20)
	F 12:30pm - 2:00pm	VMH 2509

BMGT868L Special Topics in Organizational Behavior/Human Resource Management; Seminar in Leadership

Credits: 2 Grading Method: Regular,
Audit

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

0101	Vijaya Venkataramani	Seats (Total: 12)
	Meets October 21, 2019 - December 9, 2019	
	W 9:00am - 12:50pm	VMH 4335

BMGT868P**Special Topics in Organizational Behavior/Human Resource Management; Organizational Behavior and Human Resource Management Presentations**

Credits: 1 Grading Method: Regular,
 Audit

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

0101	Vijaya Venkataramani	Seats (Total: 10)
	W 1:00pm - 2:30pm	VMH 4535

BMGT868R**Special Topics in Organizational Behavior/Human Resource Management; Organizational Behavior and Human Resource Research Methods Foundation**

Credits: 2 Grading Method: Regular,
 Audit

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

Restricted to OBHR and SM&E majors.

0101	Gilad Chen	Seats (Total: 12)
	Meets August 16, 2019 - September 25, 2019	
	Contact instructor or department for details.	

BMGT868W**Special Topics in Organizational Behavior/Human Resource Management; Work Motivation**

Credits: 2 Grading Method: Regular,
 Audit

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

0101	Trevor Foulk	Seats (Total: 12)
	Meets August 26, 2019 - October 12, 2019	
	W 9:30am - 1:00pm	VMH 4335

BMGT878C**Special Topics in Strategic Management and Entrepreneurship; Cross Disciplinary Workshop**

Credits: 1 Grading Method: Regular,
 Audit

Special topics specific to the Strategic Management and Entrepreneurship doctoral field of study.

0101	Ryan Cooper, Evan Starr	Seats (Total: 12)
	Th 11:00am - 12:30pm	VMH 3330H

BMGT878F Special Topics in Strategic Management and Entrepreneurship; Sociological Foundations

Credits: 2 Grading Method: Regular,
 Audit

Special topics specific to the Strategic Management and Entrepreneurship doctoral field of study.

0101	Waverly Ding	Seats (Total: 12)
	Meets October 21, 2019 - December 9, 2019	
	Tu 2:00pm - 5:35pm	VMH 4534

BMGT878P Special Topics in Strategic Management and Entrepreneurship; Strategy and Entrepreneurship PhD Presentations

Credits: 1 Grading Method: Regular,
 Audit

Special topics specific to the Strategic Management and Entrepreneurship doctoral field of study.

0101	Rajshree Tronetti	Seats (Total: 12)
	Th 9:15am - 10:45am	VMH 3330H

BMGT878R Special Topics in Strategic Management and Entrepreneurship; Strategy and Entrepreneurship Research Methods Foundation

Credits: 2 Grading Method: Regular,
 Audit

Special topics specific to the Strategic Management and Entrepreneurship doctoral field of study.

0101	David Waguespack	Seats (Total: 12)
	Meets October 21, 2019 - December 9, 2019	
	W 2:30pm - 6:20pm	VMH 3332

BMGT878T Special Topics in Strategic Management and Entrepreneurship; Organizational Theory

Credits: 2 Grading Method: Regular,
 Audit

Special topics specific to the Strategic Management and Entrepreneurship doctoral field of study.

0101	David Kirsch	Seats (Total: 12)
	Meets August 26, 2019 - October 12, 2019	
	W 1:00pm - 4:30pm	VMH 4534

BMGT878Y Special Topics in Strategic Management and Entrepreneurship; New Research Methods

Credits: 4 Grading Method: Regular,
Audit

Special topics specific to the Strategic Management and Entrepreneurship doctoral field of study.

0101	Evan Starr, Brent Goldfarb	Seats (Total: 12)
	W 9:00am - 12:35pm	VMH 4535

BMGT888W Special Topics in Supply Chain Management; Workshop in Supply Chain Management

Credits: 1 Grading Method: Regular

Special topics specific to the Supply Chain Management doctoral field of study.

0101	Martin Dresner	Seats (Total: 12)
	F 1:00pm - 2:30pm	VMH 3330H

BMGT898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

BMGT899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

BSCI Biological Sciences Program Fall 2019

BSCI120 Insects

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: LS General Education: DSNS

A survey of the major groups of insects, their natural history, and their relationships with humans and their environment. Course not acceptable toward major requirements in Biological Sciences, Chemistry or Biochemistry.

0101	Cerruti Hooks, Anthony Nearman	Seats (Total: 21)	
	Tu 2:00pm - 2:50pm	PLS 1161	
	Class time/details on ELMs	ONLINE	
	Th 12:00pm - 12:50pm	PLS 1161	Discussion

BSCI126

Pollinators in Crisis

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: LS General Education: DSNS, SCIS

We will dissect the pollinator crisis, and in the process learn about insects, about the interaction of organisms in complex ecosystems, and about the human-nature interface. Students will work in groups that specialize in an aspect of pollinator biology and their challenges. Instruction will target methods for collecting information, interpretation of scientific information and the professional presentation of findings.

(Sponsoring Dept.: ENTM). Not acceptable for credit for any Biological Sciences major.

0101	David Hawthorne	Seats (Total: 20)	
	TuTh 8:00am - 9:15am	PLS 1140	
	Tu 9:30am - 10:20am	PLS 1161	Discussion
0102	David Hawthorne	Seats (Total: 20)	
	TuTh 8:00am - 9:15am	PLS 1140	
	Tu 11:00am - 11:50am	PLS 1161	Discussion
0103	David Hawthorne	Seats (Total: 20)	
	TuTh 8:00am - 9:15am	PLS 1140	
	Th 9:30am - 10:20am	PLS 1161	Discussion
0104	David Hawthorne	Seats (Total: 20)	
	TuTh 8:00am - 9:15am	PLS 1140	
	Th 11:00am - 11:50am	PLS 1161	Discussion

BSCI135

Amazing Green: Plants that Transformed the World

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: LL General Education: DSNL, SCIS

An interactive way to learn about plants and science, focusing on how plants have changed human history, the biology of their growth, and the science behind their use.

(Sponsoring Dept.: CBMG). Students must pay a \$40.00 laboratory materials fee. Not acceptable for credit for any Biological Sciences major.

0101	Edgar Moctezuma TuTh 9:30am - 10:45am M 12:30pm - 2:30pm	Seats (Total: 24) HJP 0226 HJP 3237	Lab
0102	Edgar Moctezuma TuTh 9:30am - 10:45am Tu 12:00pm - 2:00pm	Seats (Total: 24) HJP 0226 HJP 3237	Lab
0103	Edgar Moctezuma TuTh 9:30am - 10:45am W 12:30pm - 2:30pm	Seats (Total: 24) HJP 0226 HJP 3237	Lab
0104	Edgar Moctezuma TuTh 9:30am - 10:45am Th 12:30pm - 2:30pm	Seats (Total: 24) HJP 0226 HJP 3237	Lab

BSCI160

Principles of Ecology and Evolution

Credits: 3

Grading Method: Regular

General Education: DSNL (if
taken with BSCI161), DSNS

*Prerequisite: Must have math eligibility of MATH120 or higher. Recommended: For Science majors.
Credit only granted for: BSCI106 or BSCI160. Formerly: BSCI106.*

Basic principles of biology with special emphasis on ecological and evolutionary biology.

(Sponsoring Dept.: BSCI).

6101	Marcia Shofner TuTh 9:30am - 10:45am	Seats (Total: 152) ESJ 1224
6201	Marcia Shofner TuTh 12:30pm - 1:45pm	Seats (Total: 152) ESJ 1224
6301	Leo Shapiro TuTh 2:00pm - 3:15pm	Seats (Total: 152) HJP 0226
6401	Danielle Adams MWF 11:00am - 11:50am	Seats (Total: 135) BPS 1250
SEF1	Kiersten Newtoff Tu 6:00pm - 8:50pm	Seats (Total: 24) PLS 1117
<i>Restricted to students in the SIE Program. Click here for more information.</i>		

BSCI161**Principles of Ecology and Evolution Lab**

Credits: 1 Grading Method: Regular

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: BSCI160. Recommended: For Science majors.

Basic laboratory principles of biology with special emphasis on ecological and evolutionary biology.

(Sponsoring Dept.: BSCI). Students must pay a \$40.00 laboratory materials fee.

6104	Leo Shapiro M 11:00am - 1:50pm	Seats (Total: 24) HJP 3211	Lab
6105	Leo Shapiro M 11:00am - 1:50pm	Seats (Total: 24) HJP 3217	Lab
6110	Leo Shapiro M 5:00pm - 7:50pm	Seats (Total: 24) HJP 3211	Lab
6111	Leo Shapiro M 5:00pm - 7:50pm	Seats (Total: 24) HJP 3217	Lab
6204	Leo Shapiro Tu 11:00am - 1:50pm	Seats (Total: 24) HJP 3211	Lab
6205	Leo Shapiro Tu 11:00am - 1:50pm	Seats (Total: 24) HJP 3217	Lab
6211	Leo Shapiro Tu 5:00pm - 7:50pm	Seats (Total: 24) HJP 3217	Lab
6304	Leo Shapiro W 11:00am - 1:50pm	Seats (Total: 24) HJP 3211	Lab
6305	Leo Shapiro W 11:00am - 1:50pm	Seats (Total: 23) HJP 3217	Lab
6307	Leo Shapiro W 2:00pm - 4:50pm	Seats (Total: 24) HJP 3211	Lab
<i>This section is restricted to BioFire students.</i>			

6311	Leo Shapiro W 5:00pm - 7:50pm	Seats (Total: 24) HJP 3217	Lab
6401	Leo Shapiro Th 8:00am - 10:50am	Seats (Total: 24) HJP 3211	Lab
6405	Leo Shapiro Th 11:00am - 1:50pm	Seats (Total: 24) HJP 3217	Lab
6408	Leo Shapiro Th 2:00pm - 4:50pm	Seats (Total: 24) HJP 3217	Lab
SEF1	Leo Shapiro Th 6:00pm - 8:50pm	Seats (Total: 24) HJP 3211	Lab
<i>Restricted to students in the SIE Program. Click here for more information.</i>			

BSCI161C

Principles of Ecology and Evolution Lab

Credits: 1

Grading Method: Regular

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: BSCI160. Recommended: For Science majors.

Basic laboratory principles of biology with special emphasis on ecological and evolutionary biology.

Restricted to new freshmen and new transfer students in Biological Science. (Sponsoring Dept.: BSCI). Students must pay a \$40.00 laboratory materials fee.

6108	Leo Shapiro M 2:00pm - 4:50pm	Seats (Total: 24) HJP 3217	Lab
6207	Leo Shapiro Tu 2:00pm - 4:50pm	Seats (Total: 24) HJP 3211	Lab
<i>Restricted to BioFire students.</i>			
6210	Leo Shapiro Tu 5:00pm - 7:50pm	Seats (Total: 24) HJP 3211	Lab
6308	Leo Shapiro W 2:00pm - 4:50pm	Seats (Total: 24) HJP 3217	Lab

6404	Leo Shapiro	Seats (Total: 24)	
	Th 11:00am - 1:50pm	HJP 3211	Lab
6407	Leo Shapiro	Seats (Total: 24)	
	Th 2:00pm - 4:50pm	HJP 3211	Lab

BSCI161S Principles of Ecology and Evolution Lab

Credits: 1 Grading Method: Regular

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: BSCI160. Recommended: For Science majors.

Basic laboratory principles of biology with special emphasis on ecological and evolutionary biology.

Restricted to College Park Scholars - Life Sciences. (Sponsoring Dept.: BSCI). Students must pay a \$40 laboratory materials fee.

6107	Leo Shapiro	Seats (Total: 24)	
	M 2:00pm - 4:50pm	HJP 3211	Lab
6208	Leo Shapiro	Seats (Total: 24)	
	Tu 2:00pm - 4:50pm	HJP 3217	Lab
6411	Leo Shapiro	Seats (Total: 24)	
	Th 5:00pm - 7:50pm	HJP 3217	Lab

BSCI170 Principles of Molecular & Cellular Biology

Credits: 3 Grading Method: Regular

General Education: DSNL (if taken with BSCI171), DSNS

Prerequisite: Must have math eligibility of MATH120 or higher. Recommended: For Science majors. Credit only granted for: BSCI105 or BSCI170. Formerly: BSCI105.

Basic principles of biology with special emphasis on cellular and molecular biology.

(Sponsoring Dept.: BSCI).

0101	Patricia Shields	Seats (Total: 140)	
	MWF 9:00am - 9:50am	ESJ 2204	
0201	Michael Keller	Seats (Total: 220)	
	MWF 11:00am - 11:50am	ESJ 0202	

0301	Michael Keller MWF 12:00pm - 12:50pm	Seats (Total: 140) ESJ 2204
0401	Reid Compton TuTh 2:00pm - 3:15pm	Seats (Total: 150) ESJ 2204
FC01	Michael Keller MW 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection</i>	Seats (Total: 161) JMZ 0220
SEF1	James Sniezek Tu 6:00pm - 8:50pm <i>Restricted to students in the SIE Program. Click here for more information.</i>	Seats (Total: 50) PLS 1130

BSCI171

Principles of Molecular & Cellular Biology Laboratory

Credits: 1

Grading Method: Regular

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: BSCI170. Recommended: For Science majors.

Basic laboratory principles of biology with special emphasis on cellular and molecular biology.

(Sponsoring Dept.: BSCI). Students must pay a \$40.00 laboratory materials fee.

1021	Swarna Mohan M 11:00am - 1:50pm	Seats (Total: 24) CHM 1110	Lab
1022	Swarna Mohan M 11:00am - 1:50pm	Seats (Total: 24) CHM 1111	Lab
1031	Swarna Mohan M 2:00pm - 4:50pm	Seats (Total: 24) CHM 1110	Lab
1032	Swarna Mohan M 2:00pm - 4:50pm	Seats (Total: 24) CHM 1111	Lab
1033	Swarna Mohan M 2:00pm - 4:50pm	Seats (Total: 24) CHM 1112	Lab
2021	Swarna Mohan Tu 11:00am - 1:50pm	Seats (Total: 24) CHM 1110	Lab

2022	Swarna Mohan Tu 11:00am - 1:50pm	Seats (Total: 24) CHM 1111	Lab
2023	Swarna Mohan Tu 11:00am - 1:50pm	Seats (Total: 24) CHM 1112	Lab
2031	Swarna Mohan Tu 2:00pm - 4:50pm	Seats (Total: 24) CHM 1110	Lab
2032	Swarna Mohan Tu 2:00pm - 4:50pm	Seats (Total: 24) CHM 1111	Lab
2033	Swarna Mohan Tu 2:00pm - 4:50pm	Seats (Total: 24) CHM 1112	Lab
3021	Swarna Mohan W 11:00am - 1:50pm	Seats (Total: 24) CHM 1110	Lab
3022	Swarna Mohan W 11:00am - 1:50pm	Seats (Total: 24) CHM 1111	Lab
3031	Swarna Mohan W 2:00pm - 4:50pm	Seats (Total: 24) CHM 1110	Lab
3032	Swarna Mohan W 2:00pm - 4:50pm	Seats (Total: 24) CHM 1111	Lab
3033	Swarna Mohan W 2:00pm - 4:50pm	Seats (Total: 24) CHM 1112	Lab
3041	Swarna Mohan W 6:00pm - 8:50pm	Seats (Total: 24) CHM 1110	Lab
4021	Swarna Mohan Th 11:00am - 1:50pm	Seats (Total: 24) CHM 1110	Lab
4022	Swarna Mohan Th 11:00am - 1:50pm	Seats (Total: 24) CHM 1111	Lab
4023	Swarna Mohan Th 11:00am - 1:50pm	Seats (Total: 24) CHM 1112	Lab

4031	Swarna Mohan Th 2:00pm - 4:50pm	Seats (Total: 24) CHM 1110	Lab
4032	Swarna Mohan Th 2:00pm - 4:50pm	Seats (Total: 24) CHM 1111	Lab
4041	Swarna Mohan Th 6:00pm - 8:50pm	Seats (Total: 24) CHM 1111	Lab
4043	Swarna Mohan Th 6:00pm - 8:50pm	Seats (Total: 24) CHM 1112	Lab
FC1M	Swarna Mohan M 6:00pm - 8:50pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 22) CHM 1110	Lab
FC1N	Swarna Mohan M 6:00pm - 8:50pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 22) CHM 1111	Lab
FC1O	Swarna Mohan M 6:00pm - 8:50pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 22) CHM 1112	Lab
FC3N	Swarna Mohan W 6:00pm - 8:50pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 22) CHM 1111	Lab
FC5B	Swarna Mohan F 8:00am - 10:50am <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 22) CHM 1111	Lab
SEF1	Swarna Mohan Th 6:00pm - 8:50pm <i>Restricted to students in the SIE Program. Click here for more information.</i>	Seats (Total: 24) CHM 1110	Lab
SEF2	Swarna Mohan Th 6:00pm - 8:50pm <i>Restricted to students in the SIE Program. Click here for more information.</i>	Seats (Total: 24) CHM 1128	Lab

BSCI189I**Beyond Race: Human Biological Diversity**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: LL, D General Education: DSNL, DSSP, DVUP, SCIS

(Sponsoring Dept.: BSCI). Students must pay a \$40.00 laboratory materials fee. Not acceptable for credit for any Biological Sciences major.

1003	Joelle Presson MWF 11:00am - 11:50am Tu 9:30am - 12:20pm	Seats (Total: 24) JMZ 0220 HJP 3239 Lab
1005	Joelle Presson MWF 11:00am - 11:50am Tu 1:00pm - 3:50pm	Seats (Total: 24) JMZ 0220 HJP 3239 Lab
1007	Joelle Presson MWF 11:00am - 11:50am W 12:00pm - 2:50pm	Seats (Total: 24) JMZ 0220 HJP 3239 Lab
1009	Joelle Presson MWF 11:00am - 11:50am W 3:00pm - 5:50pm	Seats (Total: 24) JMZ 0220 HJP 3239 Lab
1011	Joelle Presson MWF 11:00am - 11:50am Th 9:30am - 12:20pm	Seats (Total: 24) JMZ 0220 HJP 3239 Lab
1013	Joelle Presson MWF 11:00am - 11:50am Th 1:00pm - 3:50pm	Seats (Total: 24) JMZ 0220 HJP 3239 Lab

BSCI201**Human Anatomy and Physiology I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: LL General Education: DSNL

Prerequisite: BSCI170 and BSCI171; or BSCI105; or students who have taken courses with comparable content may contact the department.

Anatomy and physiology of the skeletal, muscular, neural, endocrine, and sensory systems. Course not acceptable toward major requirements in Biological Sciences, Chemistry or Biochemistry.

(Sponsoring Dept.: BIOL). Students must pay a \$40.00 laboratory materials fee.

0101	Justicia Opoku-Edusei, Caitlin Fox MWF 12:00pm - 12:50pm M 9:00am - 11:50am	Seats (Total: 24) BRB 1101 BPS 0205	Lab
0102	Justicia Opoku-Edusei, Caitlin Fox MWF 12:00pm - 12:50pm M 4:00pm - 6:50pm	Seats (Total: 24) BRB 1101 BPS 0205	Lab
0103	Justicia Opoku-Edusei, Caitlin Fox MWF 12:00pm - 12:50pm Tu 8:00am - 10:50am	Seats (Total: 24) BRB 1101 BPS 0205	Lab
0105	Caitlin Fox, Justicia Opoku-Edusei MWF 12:00pm - 12:50pm Tu 6:00pm - 8:50pm	Seats (Total: 24) BRB 1101 BPS 0205	Lab
0106	Justicia Opoku-Edusei, Caitlin Fox MWF 12:00pm - 12:50pm W 4:00pm - 6:50pm	Seats (Total: 24) BRB 1101 BPS 0205	Lab
0107	Caitlin Fox, Justicia Opoku-Edusei MWF 12:00pm - 12:50pm W 7:00pm - 9:50pm	Seats (Total: 24) BRB 1101 BPS 0205	Lab
0108	Justicia Opoku-Edusei, Caitlin Fox MWF 12:00pm - 12:50pm Th 11:00am - 1:50pm	Seats (Total: 24) BRB 1101 BPS 0205	Lab
0109	Caitlin Fox, Justicia Opoku-Edusei MWF 12:00pm - 12:50pm M 9:00am - 11:50am	Seats (Total: 24) BRB 1101 BPS 0275	Lab
0110	Justicia Opoku-Edusei, Caitlin Fox MWF 12:00pm - 12:50pm M 4:00pm - 6:50pm	Seats (Total: 24) BRB 1101 BPS 0275	Lab
0111	Caitlin Fox, Justicia Opoku-Edusei MWF 12:00pm - 12:50pm Tu 11:00am - 1:50pm	Seats (Total: 24) BRB 1101 BPS 0275	Lab

0112	Caitlin Fox, Justicia Opoku-Edusei MWF 12:00pm - 12:50pm Tu 5:00pm - 7:50pm	Seats (Total: 24) BRB 1101 BPS 0275	Lab
1101	Caitlin Fox, Sara Lombardi TuTh 12:30pm - 1:45pm M 1:00pm - 3:50pm	Seats (Total: 24) ESJ 0202 BPS 0205	Lab
1102	Sara Lombardi, Caitlin Fox TuTh 12:30pm - 1:45pm M 7:00pm - 9:50pm	Seats (Total: 24) ESJ 0202 BPS 0205	Lab
1103	Sara Lombardi, Caitlin Fox TuTh 12:30pm - 1:45pm Tu 2:00pm - 4:50pm	Seats (Total: 24) ESJ 0202 BPS 0205	Lab
1104	Sara Lombardi, Caitlin Fox TuTh 12:30pm - 1:45pm W 9:00am - 11:50am	Seats (Total: 24) ESJ 0202 BPS 0205	Lab
1105	Sara Lombardi, Caitlin Fox TuTh 12:30pm - 1:45pm W 1:00pm - 3:50pm	Seats (Total: 24) ESJ 0202 BPS 0205	Lab
1106	Caitlin Fox, Sara Lombardi TuTh 12:30pm - 1:45pm Th 8:00am - 10:50am	Seats (Total: 24) ESJ 0202 BPS 0205	Lab
1107	Sara Lombardi, Caitlin Fox TuTh 12:30pm - 1:45pm Th 2:00pm - 4:50pm	Seats (Total: 24) ESJ 0202 BPS 0205	Lab
1108	Caitlin Fox, Sara Lombardi TuTh 12:30pm - 1:45pm Th 6:00pm - 8:50pm	Seats (Total: 24) ESJ 0202 BPS 0205	Lab
1109	Sara Lombardi, Caitlin Fox TuTh 12:30pm - 1:45pm M 1:00pm - 3:50pm	Seats (Total: 24) ESJ 0202 BPS 0275	Lab

1110	Caitlin Fox, Sara Lombardi	Seats (Total: 24)		
	TuTh 12:30pm - 1:45pm	ESJ 0202		
	Tu 2:00pm - 4:50pm	BPS 0275	Lab	

BSCI202

Human Anatomy and Physiology II

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BSCI201; or permission of CMNS-Biology department.

Anatomy and physiology of the cardiovascular, respiratory, immune, digestive, urinary and reproductive systems. Course not acceptable toward major requirements in Biological Sciences, Chemistry or Biochemistry.

(Sponsoring Dept.: BIOL). Students must pay a \$40.00 laboratory materials fee.

0101	Caitlin Fox, Tammatha O'Brien	Seats (Total: 24)		
	TuTh 8:00am - 9:15am	ESJ 0202		
	M 11:00am - 1:50pm	BPS 0201	Lab	
0102	Tammatha O'Brien, Caitlin Fox	Seats (Total: 24)		
	TuTh 8:00am - 9:15am	ESJ 0202		
	Tu 9:30am - 12:20pm	BPS 0201	Lab	
0106	Caitlin Fox, Tammatha O'Brien	Seats (Total: 24)		
	TuTh 8:00am - 9:15am	ESJ 0202		
	Tu 7:00pm - 9:50pm	BPS 0201	Lab	
0109	Caitlin Fox, Tammatha O'Brien	Seats (Total: 24)		
	TuTh 8:00am - 9:15am	ESJ 0202		
	W 2:00pm - 4:50pm	BPS 0201	Lab	
0110	Caitlin Fox, Tammatha O'Brien	Seats (Total: 24)		
	TuTh 8:00am - 9:15am	ESJ 0202		
	W 5:00pm - 7:50pm	BPS 0201	Lab	
0112	Tammatha O'Brien, Caitlin Fox	Seats (Total: 24)		
	TuTh 8:00am - 9:15am	ESJ 0202		
	Th 11:00am - 1:50pm	BPS 0201	Lab	

0113	Caitlin Fox, Tammatha O'Brien TuTh 8:00am - 9:15am Th 9:30am - 12:20pm	Seats (Total: 24) ESJ 0202 BPS 0275	Lab
1101	Sara Lombardi, Caitlin Fox TuTh 9:30am - 10:45am M 5:00pm - 7:50pm	Seats (Total: 24) ESJ 0224 BPS 0201	Lab
1103	Sara Lombardi, Caitlin Fox TuTh 9:30am - 10:45am Tu 4:00pm - 6:50pm	Seats (Total: 24) ESJ 0224 BPS 0201	Lab
1104	Sara Lombardi, Caitlin Fox TuTh 9:30am - 10:45am W 8:00am - 10:50am	Seats (Total: 24) ESJ 0224 BPS 0201	Lab
1105	Sara Lombardi, Caitlin Fox TuTh 9:30am - 10:45am W 11:00am - 1:50pm	Seats (Total: 24) ESJ 0224 BPS 0201	Lab
1106	Sara Lombardi, Caitlin Fox TuTh 9:30am - 10:45am Th 2:00pm - 4:50pm	Seats (Total: 24) ESJ 0224 BPS 0201	Lab
1107	Caitlin Fox, Sara Lombardi TuTh 9:30am - 10:45am Th 1:00pm - 3:50pm	Seats (Total: 24) ESJ 0224 BPS 0275	Lab
1108	Sara Lombardi, Caitlin Fox TuTh 9:30am - 10:45am Th 5:00pm - 7:50pm	Seats (Total: 24) ESJ 0224 BPS 0275	Lab
1109	Sara Lombardi, Caitlin Fox TuTh 9:30am - 10:45am F 8:00am - 10:50am	Seats (Total: 24) ESJ 0224 BPS 0201	Lab
SEF1	Caitlin Fox, Justicia Opoku-Edusei Tu 6:00pm - 8:50pm Th 6:00pm - 8:50pm	Seats (Total: 24) PLS 1119 BPS 0201	Lab
<i>Restricted to students in the SIE Program. Click here for more information.</i>			

BSCI207**Principles of Biology III - Organismal Biology**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BSCI160 and BSCI161; or BSCI106. And BSCI170 and BSCI171; or BSCI105. And must have completed or be concurrently enrolled in CHEM131.

The diversity, structure and function of organisms as understood from the perspective of their common physicochemical principles and unique evolutionary histories.

(Sponsoring Dept.: BSCI).

0101	Bretton Kent	Seats (Total: 180)
	MWF 9:00am - 9:50am	HJP 0226
0201	Karen Carleton	Seats (Total: 150)
	MWF 2:00pm - 2:50pm	ESJ 1224
0301	Karen Carleton	Seats (Total: 135)
	MWF 3:00pm - 3:50pm	ESJ 1224

BSCI222**Principles of Genetics**

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHEM131 and CHEM132; and (BSCI160 and BSCI161; or BSCI106); and (BSCI170 and BSCI171; or BSCI105). Or must have completed BSCI105 or (BSCI170 and BSCI171); and two semesters of chemistry.

Principles and mechanisms of heredity and gene expression. Considers plant, animal, and microbial organisms.

(Sponsoring Dept.: BSCI).

2121	Kimberly Paczolt	Seats (Total: 23)
	MWF 1:00pm - 1:50pm	BRB 1101
	W 10:00am - 11:50am	HJP 3233 Discussion
2122	Kimberly Paczolt	Seats (Total: 23)
	MWF 1:00pm - 1:50pm	BRB 1101
	Th 4:00pm - 5:50pm	HJP 3233 Discussion

2124	Kimberly Paczolt MWF 1:00pm - 1:50pm Tu 10:00am - 11:50am	Seats (Total: 23) BRB 1101 PLS 1121	Discussion
2125	Kimberly Paczolt MWF 1:00pm - 1:50pm Tu 12:00pm - 1:50pm	Seats (Total: 23) BRB 1101 HJP 3233	Discussion
2127	Kimberly Paczolt MWF 1:00pm - 1:50pm Tu 12:00pm - 1:50pm	Seats (Total: 23) BRB 1101 PLS 1121	Discussion
2129	Kimberly Paczolt MWF 1:00pm - 1:50pm W 10:00am - 11:50am	Seats (Total: 12) BRB 1101 HJP 3239	Discussion
2130	Kimberly Paczolt MWF 1:00pm - 1:50pm W 3:00pm - 4:50pm	Seats (Total: 23) BRB 1101 HJP 3233	Discussion
2132	Kimberly Paczolt MWF 1:00pm - 1:50pm W 5:00pm - 6:50pm	Seats (Total: 23) BRB 1101 HJP 3233	Discussion
2137	Kimberly Paczolt MWF 1:00pm - 1:50pm Th 12:00pm - 1:50pm	Seats (Total: 23) BRB 1101 HJP 3233	Discussion
2140	Kimberly Paczolt MWF 1:00pm - 1:50pm W 5:00pm - 6:50pm	Seats (Total: 23) BRB 1101 PLS 1121	Discussion
2141	Kimberly Paczolt MWF 1:00pm - 1:50pm Th 2:00pm - 3:50pm	Seats (Total: 23) BRB 1101 PLS 1121	Discussion
2211	Thomas Kocher TuTh 11:00am - 12:15pm M 12:00pm - 1:50pm	Seats (Total: 23) SKN 0200 PLS 1162	Discussion

2215	Thomas Kocher TuTh 11:00am - 12:15pm Tu 2:00pm - 3:50pm	Seats (Total: 24) SKN 0200 HJP 3233	Discussion
2221	Thomas Kocher TuTh 11:00am - 12:15pm Tu 4:00pm - 5:50pm	Seats (Total: 24) SKN 0200 PLS 1117	Discussion
2231	Thomas Kocher TuTh 11:00am - 12:15pm Tu 6:00pm - 7:50pm	Seats (Total: 24) SKN 0200 PLS 1111	Discussion
2251	Thomas Kocher TuTh 11:00am - 12:15pm W 12:00pm - 1:50pm	Seats (Total: 23) SKN 0200 PLS 1158	Discussion
2264	Thomas Kocher TuTh 11:00am - 12:15pm Th 8:00am - 9:50am	Seats (Total: 24) SKN 0200 HBK 0105	Discussion
2265	Thomas Kocher TuTh 11:00am - 12:15pm Th 2:00pm - 3:50pm	Seats (Total: 24) SKN 0200 PLS 1119	Discussion
2267	Thomas Kocher TuTh 11:00am - 12:15pm Th 4:00pm - 5:50pm	Seats (Total: 23) SKN 0200 PLS 1172	Discussion

BSCI223

General Microbiology

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: LL General Education: DSNL, SCIS

Prerequisite: BSCI170 and BSCI171; or BSCI105.

Fundamental concepts in morphology, physiology, genetics, immunology, ecology, and pathogenic microbiology. Applications of microbiology to medicine, the food industry and biotechnology.

(Sponsoring Dept.: CBMG). Students must pay a \$40.00 laboratory materials fee.

1101	John Buchner TuTh 11:00am - 11:50am MW 10:00am - 11:50am	Seats (Total: 20) BRB 1101 MCB 1201	Lab
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1106	John Buchner TuTh 11:00am - 11:50am MW 10:00am - 11:50am	Seats (Total: 20) BRB 1101 MCB 1206	Lab
1121	John Buchner TuTh 11:00am - 11:50am TuTh 9:00am - 10:50am	Seats (Total: 20) BRB 1101 MCB 1201	Lab
1126	John Buchner TuTh 11:00am - 11:50am TuTh 9:00am - 10:50am	Seats (Total: 20) BRB 1101 MCB 1206	Lab
1201	John Buchner TuTh 11:00am - 11:50am MW 12:00pm - 1:50pm	Seats (Total: 20) BRB 1101 MCB 1201	Lab
1206	John Buchner TuTh 11:00am - 11:50am MW 12:00pm - 1:50pm	Seats (Total: 20) BRB 1101 MCB 1206	Lab
1221	John Buchner TuTh 11:00am - 11:50am TuTh 12:00pm - 1:50pm	Seats (Total: 20) BRB 1101 MCB 1201	Lab
1225	John Buchner TuTh 11:00am - 11:50am TuTh 12:00pm - 1:50pm	Seats (Total: 20) BRB 1101 MCB 1205	Lab
1301	John Buchner TuTh 11:00am - 11:50am MW 2:00pm - 3:50pm	Seats (Total: 20) BRB 1101 MCB 1201	Lab
1306	John Buchner TuTh 11:00am - 11:50am MW 2:00pm - 3:50pm	Seats (Total: 20) BRB 1101 MCB 1206	Lab
1321	John Buchner TuTh 11:00am - 11:50am TuTh 2:00pm - 3:50pm	Seats (Total: 20) BRB 1101 MCB 1201	Lab

1325	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	BRB 1101	
	TuTh 2:00pm - 3:50pm	MCB 1205	Lab
1326	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	BRB 1101	
	TuTh 2:00pm - 3:50pm	MCB 1206	Lab
1405	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	BRB 1101	
	MW 4:00pm - 5:50pm	MCB 1206	Lab
2105	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	BRB 1101	
	MW 10:00am - 11:50am	MCB 1205	Lab
2125	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	BRB 1101	
	TuTh 9:00am - 10:50am	MCB 1205	Lab
2226	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	BRB 1101	
	TuTh 12:00pm - 1:50pm	MCB 1206	Lab
2401	John Buchner	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	BRB 1101	
	MW 4:00pm - 5:50pm	MCB 1201	Lab
SEF1	John Buchner	Seats (Total: 20)	
	TuTh 6:00pm - 6:50pm	MCB 1207	
	TuTh 7:00pm - 9:00pm	MCB 1201	Lab
<i>Restricted to students in the SIE Program. Click here for more information.</i>			

BSCI238A

Special Topics in Biology Student Initiated Courses; Ornithology

Credits: 1

Grading Method: Regular

Student Initiated Course (STIC) in Biology. Course will be student initiated and taught under close supervision of faculty mentor. Student instructor and faculty mentor must generate proposal and have approval of the Biological Sciences Program to offer a BSCI238 STIC. BSCI238 cannot be applied to the degree requirements of any biological sciences major.

This is a special course offering as part of the Student Initiated Course (STICs) program. The course facilitator is Ms. Madison Plunkert. This course serves as an introduction to the field of ornithology, including the identification, evolution, and ecology of birds, as well as the methods by which biologists study these topics. BSCI160 is a recommended pre-requisite.

0101	Thomas Holtz	Seats (Total: 20)
	M 5:00pm - 5:50pm	PLS 1115

BSCI279 Supplemental Study; Supplemental Study in Biology

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

(Sponsoring Dept.: BIOL).

Contact department for information to register for this course.

BSCI279P Supplemental Study; Undergraduate Teaching Fellows Professional Development Seminar

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

Prerequisite: permission of department.

Contact department for information to register for this course.

BSCI279Q Supplemental Study; Readings in Neurophysiology

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

(Sponsoring Dept.: BIOL).

0101	Patrick Kanold, Ricardo Araneda, Elizabeth Quinlan, Daniel Butts	Seats (Total: 13)
	Contact instructor or department for details.	

BSCI279R Supplemental Study; Undergraduate Research Rotation

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

(Sponsoring Dept.: CBMG).

Contact department for information to register for this course.

BSCI279T

Supplemental Study; BSCI Learning Assistants

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Research or special study to complement a course taken previously which is not fully equivalent to current departmental requirements. Credit according to work done.

Contact department for information to register for this course.

BSCI283

Principles of Microbiology

Credits: 4

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSNL,
SCIS

Prerequisite: BSCI207 and BSCI222. Credit only granted for: BSCI223 or BSCI283. Additional information: Priority given to BSCI, BCHM and CHEM majors.

Introduction to microorganisms designed for science majors. Genetic principles underlying microbial abilities; microbial structure-function relationships; metabolism, physiology, and ecology of microorganisms; interactions between microorganisms (including pathogens) and their hosts.

(Sponsoring Dept.: CBMG).

1205	Wade Winkler	Seats (Total: 20)	
	MW 10:00am - 10:50am	ESJ 1215	
	MW 12:00pm - 1:50pm	MCB 1205	Lab
1305	Wade Winkler	Seats (Total: 20)	
	MW 10:00am - 10:50am	ESJ 1215	
	MW 2:00pm - 3:50pm	MCB 1205	Lab

BSCI288

Internship; Field Experience

(Perm req)

Credits: 1-6

Grading Method: Regular,
Pass-Fail, Audit

An individual experience arranged by the student with the instructor.

(Sponsoring Dept.: BSCI).

Contact department for information to register for this course.

BSCI288H

Internship

(Perm req)

Credits: 1-6

Grading Method: Regular,
Pass-Fail, Audit

An individual experience arranged by the student with the instructor.

Contact department for information to register for this course.

BSCI289

Off-Campus Internship

(Perm req)

Credits: 1-3

Grading Method: Sat-Fail

Elective credit for formally established off-campus research internship. Permission of Director of Outreach required.

(Sponsoring Dept.: BSCI). Provides credit for off-campus research internships. This credit counts as elective toward graduation, but does not satisfy any Biological Sciences degree requirements (For information about research credit that does count toward Biological Sciences contact the Biological Sciences Program, room 1322 Symons Hall). The off-campus internship credit requires that a contract form be filed with the Assistant Dean for Science Education Initiatives, Room 1313 Symons Hall, prior to the internship. The contract must be finalized and signed by the research supervisor at the end of the semester before credit will be awarded.

1110	Katerina Thompson	Seats (Total: 20)
Contact instructor or department for details.		
1111	Katerina Thompson	Seats (Total: 40)
Contact instructor or department for details.		

BSCI300

Strategies for Success

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in a major in USG-Universities at Shady Grove; and must be in Biological Sciences: Physiology & Neurobiology program. Credit only granted for: BSCI300 or BSCI339R. Formerly: BSCI339R.

Students often face an increased emphasis on critical thinking, pressure from a typically higher credit hour load, and a faster pace of exposure to new material when moving from lower- to upper-level coursework. The Biological Sciences program designed this course to help all transfer students make successful transitions, both academically and socially, to the University of Maryland at Shady Grove.

SG91	Annie Foster Ahmed	Seats (Total: 40)
	F 9:30am - 10:20am	Location: TBA
<i>Registration is restricted to Biological Sciences-Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci@umd.edu for permission.</i>		

BSCI329 Instructional Assistance Practicum

(Perm req)

Credits: 1-2 Grading Method: Regular,
Pass-Fail

Students serve as instructional assistants in selected undergraduate biology courses. Roles and responsibilities are determined on a course- specific basis and approved by the College Undergraduate Program Committee.

Prerequisite: permission of department. (Sponsoring Dept.: BIOL). Credit cannot be applied to the requirements of any Biological Sciences Major.

1016	Hilary Bierman	Seats (Total: 10)
	Contact instructor or department for details.	
1250	Justicia Opoku-Edusei	Seats (Total: 20)
	Contact instructor or department for details.	
2080	Sabrina Kramer, Todd Cooke	Seats (Total: 10)
	Contact instructor or department for details.	

BSCI330 Cell Biology and Physiology

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM131 and CHEM132. And minimum grade of C- in BSCI170 and BSCI171; or minimum grade of C- in BSCI105. Restriction: Must not have completed BSCI230. Credit only granted for: BSCI230 or BSCI330. Formerly: BSCI230.

Biochemical and physiological mechanisms underlying cellular function. Properties of cells which make life possible and mechanisms by which cells provide energy, reproduce, and regulate and integrate with each other and their environment.

(Sponsoring Dept.: BIOL). Specialization Areas: PHNB, CEBG, MICB, ECEV, and GENB. Students must pay a \$40.00 laboratory materials fee.

0101	Albert Ades	Seats (Total: 24)
	MWF 9:00am - 9:50am	BRB 1101
	M 11:00am - 1:50pm	BPS 0207 Lab

0102	Albert Ades MWF 9:00am - 9:50am M 2:00pm - 4:50pm	Seats (Total: 24) BRB 1101 BPS 0207	Lab
0103	Albert Ades MWF 9:00am - 9:50am Tu 8:00am - 10:50am	Seats (Total: 24) BRB 1101 BPS 0207	Lab
0104	Albert Ades MWF 9:00am - 9:50am Tu 11:00am - 1:50pm	Seats (Total: 24) BRB 1101 BPS 0207	Lab
0105	Albert Ades MWF 9:00am - 9:50am W 11:00am - 1:50pm	Seats (Total: 24) BRB 1101 BPS 0207	Lab
0107	Albert Ades MWF 9:00am - 9:50am W 6:00pm - 8:50pm	Seats (Total: 24) BRB 1101 BPS 0207	Lab
0108	Albert Ades MWF 9:00am - 9:50am Th 8:00am - 10:50am	Seats (Total: 24) BRB 1101 BPS 0207	Lab
0109	Albert Ades MWF 9:00am - 9:50am Th 11:00am - 1:50pm	Seats (Total: 24) BRB 1101 BPS 0207	Lab
0111	Albert Ades MWF 9:00am - 9:50am M 6:00pm - 8:50pm	Seats (Total: 24) BRB 1101 BPS 0207	Lab
0114	Albert Ades MWF 9:00am - 9:50am Th 2:00pm - 4:50pm	Seats (Total: 24) BRB 1101 BPS 0207	Lab
1101	Kenneth Frauwirth TuTh 12:30pm - 1:45pm M 11:00am - 1:50pm	Seats (Total: 24) ESJ 0224 BPS 0213	Lab

1102	Kenneth Frauwirth TuTh 12:30pm - 1:45pm M 2:00pm - 4:50pm	Seats (Total: 24) ESJ 0224 BPS 0213	Lab
1103	Kenneth Frauwirth TuTh 12:30pm - 1:45pm Tu 8:30am - 11:20am	Seats (Total: 24) ESJ 0224 BPS 0213	Lab
1104	Kenneth Frauwirth TuTh 12:30pm - 1:45pm Tu 2:00pm - 4:50pm	Seats (Total: 24) ESJ 0224 BPS 0213	Lab
1105	Kenneth Frauwirth TuTh 12:30pm - 1:45pm W 11:00am - 1:50pm	Seats (Total: 24) ESJ 0224 BPS 0213	Lab
1106	Kenneth Frauwirth TuTh 12:30pm - 1:45pm W 2:00pm - 4:50pm	Seats (Total: 24) ESJ 0224 BPS 0213	Lab
1107	Kenneth Frauwirth TuTh 12:30pm - 1:45pm M 6:00pm - 8:50pm	Seats (Total: 24) ESJ 0224 BPS 0213	Lab
1108	Kenneth Frauwirth TuTh 12:30pm - 1:45pm Th 6:00pm - 8:50pm	Seats (Total: 24) ESJ 0224 BPS 0213	Lab
SEF1	Elizabeth Read-Connole Tu 6:30pm - 9:30pm Th 6:30pm - 9:30pm <i>Restricted to students in the SIE Program. Click here for more information.</i>	Seats (Total: 24) PLS 1146 BPS 0207	Lab
SG91	Hadiya Woodham TuTh 11:00am - 12:15pm Th 2:00pm - 4:50pm <i>Registration is restricted to Biological Sciences-Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci@umd.edu for permission.</i>	Seats (Total: 22) BLD2 3052 BLD2 4012	Lab

SG92	Hadiya Woodham	Seats (Total: 22)	
	TuTh 11:00am - 12:15pm	BLD2 3052	
	Tu 2:00pm - 4:50pm	BLD2 4012	Lab

BSCI330H Cell Biology and Physiology

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM131 and CHEM132. And minimum grade of C- in BSCI170 and BSCI171; or minimum grade of C- in BSCI105. Restriction: Must not have completed BSCI230. Credit only granted for: BSCI230 or BSCI330. Formerly: BSCI230.

Biochemical and physiological mechanisms underlying cellular function. Properties of cells which make life possible and mechanisms by which cells provide energy, reproduce, and regulate and integrate with each other and their environment.

(Sponsoring Dept.: BIOL). Specialization Areas: PHNB, CEBG, MICB, ECEV and GENB. Restricted to students in the Integrated Life Science Honors program or permission of the instructor. Students must pay a \$40.00 laboratory materials fee.

0101	Sabrina Kramer	Seats (Total: 24)	
	MWF 11:00am - 11:50am	TWS 0320	
	Tu 2:00pm - 4:50pm	BPS 0207	Lab
0102	Sabrina Kramer	Seats (Total: 24)	
	MWF 11:00am - 11:50am	TWS 0320	
	W 2:00pm - 4:50pm	BPS 0207	Lab
0103	Sabrina Kramer	Seats (Total: 24)	
	MWF 11:00am - 11:50am	TWS 0320	
	W 6:00pm - 8:50pm	BPS 0213	Lab
0104	Sabrina Kramer	Seats (Total: 24)	
	MWF 11:00am - 11:50am	TWS 0320	
	Th 2:00pm - 4:50pm	BPS 0213	Lab

BSCI338B Special Topics in Biology; Marine Biology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

Prerequisite: BSCI160. (Sponsoring Dept: BIOL). Acceptable towards Biological Sciences
Specialization Areas: GENB and ECEV.

0101	Marjorie Reaka	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	BPS 1238

BSCI338D Special Topics in Biology; Complexity of Cancer

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

(Sponsoring Dept.: BIOL).

Contact department for information to register for this course.

BSCI338G Special Topics in Biology; Seminar on Deregulated Cell Growth in Cancer and Drug Development

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

Prerequisite: BSCI330. (Sponsoring Dept.: BIOL). Acceptable towards Biological Sciences
Specialization Areas: PHNB and GENB. This is a seminar-style course meant to give students opportunities to research independently, prepare, and present professional-level lectures focusing on topics in cancer biology and on the developments of anti-cancer drugs.

0101	Albert Ades	Seats (Total: 20)
	WF 12:00pm - 12:50pm	BPS 1238

BSCI338I Special Topics in Biology; Medical Biotechnology & Drug Development

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

(Sponsoring Dept.: BIOL).

Contact department for information to register for this course.

BSCI338J Special Topics in Biology; Medical Exploration of HIV/AIDS

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

(Sponsoring Dept.: BIOL).

Contact department for information to register for this course.

BSCI338M Special Topics in Biology; Human Health and Disease: A Clinical Approach

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

(Sponsoring Dept.: BIOL).

Contact department for information to register for this course.

BSCI338Z Special Topics in Biology; Field Research

(Perm req) Grading Method: Regular,
Credits: 1-3 Pass-Fail, Audit

Lectures, seminars, mini-courses and other special instruction in various biological subjects.

(Sponsoring Dept: BIOL). Cannot be used as credit toward the major requirements for any Biological Sciences major. Contact the Biology Department Undergraduate Office for course information.

Contact department for information to register for this course.

BSCI339C Selected Topics in Biology; Cell Biology Lab

(Perm req) Grading Method: Regular,
Credits: 1 Pass-Fail, Audit

Lectures, seminars, and other selected instruction courses in various biological subject matter.

Prerequisites: BSCI420. Credit will be granted for BSCI339C or BSCI421. (Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: PHNB, CEBG, and GENB. Students must pay a \$40.00 laboratory materials fee.

Contact department for information to register for this course.

BSCI339D Selected Topics in Biology; Biology of Chemosensory Systems

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Lectures, seminars, and other selected instruction courses in various biological subject matter.

Prerequisite: BSCI353. (Sponsoring Dept.: BIOL). Applicable towards Biological Sciences Specialization areas: GENB, PHNB.

0101	Ricardo Araneda	Seats (Total: 10)
	MW 2:00pm - 3:15pm	BPS 1230

BSCI339I Selected Topics in Biology; Cellular Mechanisms of Aging and Disease

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Lectures, seminars, and other selected instruction courses in various biological subject matter.

This course will explore the cellular mechanisms underlying aging and a variety of noninfectious diseases and disorders ranging from diabetes and obesity to Alzheimer's and various cancers. In addition to lectures, students will read and discuss relevant primary and secondary literature. Assessments will include student-led discussion of primary literature and group presentations of disease topics.

SG91	Hadiya Woodham	Seats (Total: 25)
	MW 1:00pm - 2:15pm	BLD2 2062
<i>Registration is restricted to Biological Sciences - Shady Grove majors.</i>		

BSCI339W Selected Topics in Biology; Molecular Neuroethology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Lectures, seminars, and other selected instruction courses in various biological subject matter.

Prerequisite: C- or better in BSCI222 and BSCI353; or permission of the instructor. Sponsoring Dept.:Biol). Acceptable towards Biological Sciences Specialization Areas: GENB (Genetics & Evolution), CEBG, and PHNB. The brain generates a tremendous variety of behaviors, but how it achieves these feats remains largely unknown. This course will focus on the use of molecular genetic approaches to understand the brain circuits underlying behavior.

0101	Scott Juntti	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	BPS 0283

BSCI348 Special Topics in Cell Biology and Molecular Genetics

(Perm req) Credits: 1-4 Grading Method: Regular,
Pass-Fail, Audit

Presentation and discussion of special subjects in the field of cell biology and molecular genetics. A maximum of three credit hours of BSCI 348 may be applied to major.

(Sponsoring Dept.: CBMG). May be repeated, but only 3 credits may be applied to major requirements.

Contact department for information to register for this course.

BSCI348A Special Topics in Cell Biology and Molecular Genetics; Microbiology Undergraduate Teaching Practicum

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Presentation and discussion of special subjects in the field of cell biology and molecular genetics. A maximum of three credit hours of BSCI 348 may be applied to major.

(Sponsoring Dept.: CBMG). Students will act as Undergraduate Teaching Assistants for BSCI223. Prerequisite: A or B in BSCI223 and permission of instructor. Students must be available for one of the BSCI223 lab periods. Students interested in this teaching/leadership opportunity should contact Dr. John Buchner for application information: This course is applicable for the Enrichment credits required of all Biological Sciences students in majors with 0404 codes. For others this is elective credit. Formerly: BSCI348U.

0101	John Buchner	Seats (Total: 25)
	F 8:00am - 8:50am	BPS 1234
	Contact instructor or department for details.	

BSCI348K Special Topics in Cell Biology and Molecular Genetics; Scientific Readings on the Cell Biology Cancer

Credits: 3-4 Grading Method: Regular,
Pass-Fail, Audit

Presentation and discussion of special subjects in the field of cell biology and molecular genetics. A maximum of three credit hours of BSCI 348 may be applied to major.

SEF1	Volker Briken	Seats (Total: 14)
	W 6:00pm - 9:00pm	PLS 1146
	<i>Restricted to students in SIE Program.</i>	

BSCI348P Special Topics in Cell Biology and Molecular Genetics; Introductory Biology Curriculum and Instruction Practicum

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Presentation and discussion of special subjects in the field of cell biology and molecular genetics. A maximum of three credit hours of BSCI 348 may be applied to major.

(Sponsoring Dept.: CBMG). Students will learn about methodologies and curriculum tools applicable to the field of undergraduate science education; the practicum component of the course will allow students to directly apply such innovative approaches through an undergraduate teaching and learning assistantship (UTLA) in conjunction with BSCI105. Prerequisite: A or B in BSCI105 and permission of instructor. Student must be available for one of the BSCI105 lecture periods (MWF 10-10:50). Students interested in this teaching/leadership opportunity should contact either Dr. Patricia Shields (pshields@umd.edu) for further information. This course is applicable for the Enrichment credits required of all Biological students in majors with 0404 codes. For others this is an elective credit.

0201	Patricia Shields	Seats (Total: 20)
	M 5:00pm - 7:00pm	ESJ 2212
	Contact instructor or department for details.	

BSCI348Q Special Topics in Cell Biology and Molecular Genetics; Introductory Biology Learning Assistantship

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Presentation and discussion of special subjects in the field of cell biology and molecular genetics. A maximum of three credit hours of BSCI 348 may be applied to major.

(Sponsoring Dept.: CBMG). Students apply methodologies learned in BSCI348P by serving as an undergraduate learning assistant (ULA) in conjunction with BSCI170 (formerly BSCI105). Prerequisite: A or B in BSCI348P and permission of instructor. Student must be available for one of the BSCI170 lecture periods (MWF 11-11:50 or 2:00-2:50). Students interested in this teaching/leadership opportunity should contact Dr. Patricia Shields (pshields@umd.edu) for further information.

0101	Patricia Shields	Seats (Total: 46)
	M 6:00pm - 7:00pm	ESJ 2212
	Contact instructor or department for details.	

BSCI348R Special Topics in Cell Biology and Molecular Genetics; Microbiology Internship

(Perm req)

Credits: 1-4 Grading Method: Regular,
Pass-Fail, Audit

Presentation and discussion of special subjects in the field of cell biology and molecular genetics. A maximum of three credit hours of BSCI 348 may be applied to major.

(Sponsoring Dept.: CBMG). This course is an opportunity for students interested in microbiology to pursue a research project in an off-campus lab. The student must see the instructor and complete an information sheet found on the web site, prior to enrolling in the course.

0101	David Straney	Seats (Total: 8)
	Contact instructor or department for details.	

BSCI353**Principles of Neuroscience**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (BSCI207, BSCI330). Corequisite: PHYS122, PHYS142, or PHYS132.

Principles of nervous system function, ranging from molecular and cellular basis of neuron function through nervous system integration.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: CEBG (Cell Biology), Development, Physiology), and PHNB.

0101	Patrick Kanold	Seats (Total: 180)
	TuTh 12:30pm - 1:45pm	HJP 0226

BSCI355**Sensation and Perception**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI353.

Peripheral and central anatomy, function, and plasticity of several sensory systems across a wide range of animal taxa. Readings include seminal and modern day papers as well as excerpts from books. Students will be expected to give in-depth presentations on a pre-selected topic and discuss readings each week in a journal club-style format.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: GENB (Cell Biology category) and PHNB.

0101	Melissa Caras	Seats (Total: 30)
	W 2:00pm - 4:50pm	BPS 1228

BSCI360**Principles of Animal Behavior**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BSCI160 and BSCI161; or BSCI106. And BSCI170 and BSCI171; or BSCI105. And BSCI222.

Study of animal behavior with emphasis on its evolution and function. Topics include genetic basis of behavior, communication, aggression, foraging, cooperation, mate selection, and relevance for conservation.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences specialization areas: PHNB, and GENB.

0101	Gerald Borgia	Seats (Total: 20)		
	MW 11:00am - 11:50am	PLS 1130		
	F 10:00am - 10:50am	PLS 1162		Discussion
0103	Gerald Borgia	Seats (Total: 20)		
	MW 11:00am - 11:50am	PLS 1130		
	F 11:00am - 11:50am	PLS 1162		Discussion

BSCI361

Principles of Ecology

Credits: 4 Grading Method: Regular,
Pass-Fail

Prerequisite: BSCI160 and BSCI161; or BSCI106. And (MATH130, MATH136, or MATH140).

Basic principles of population, community, and ecosystem ecology. Use of these principles to predict possible consequences of human-caused changes in the environment and to understand the level of uncertainty of those predictions.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: ECEV and GENB.

0101	Nathan Swenson	Seats (Total: 25)		
	TuTh 9:30am - 10:45am	PLS 1130		
	W 2:00pm - 2:50pm	PLS 1115		Discussion
0102	Nathan Swenson	Seats (Total: 25)		
	TuTh 9:30am - 10:45am	PLS 1130		
	W 3:00pm - 3:50pm	PLS 1115		Discussion
0103	Nathan Swenson	Seats (Total: 25)		
	TuTh 9:30am - 10:45am	PLS 1130		
	W 4:00pm - 4:50pm	PLS 1115		Discussion

BSCI363

The Biology of Conservation and Extinction

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI361.

Ecology, evolutionary biology, and paleontology will be applied to the study of conservation, species invasions, and extinction.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: ECEV and GENB (Ecology, Behavior & Organismal).

0101	Francisca Saavedra	Seats (Total: 35)
	MWF 11:00am - 11:50am	ESJ 1309

BSCI370 Principles of Evolution

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BSCI160 and BSCI161; or BSCI106.

Understanding evolutionary processes in a natural and human environment, including adaptation; DNA sequence, protein, and genome evolution; evolution of developmental mechanisms; mechanisms of evolutionary change (mutation, natural selection, drift); epidemiology; coevolution and biological control; speciation; comparative methods; extinction and conservation; human evolution.

(Sponsoring Dept.: BIOL) Applies to Biological Sciences Specialization Areas: PHNB, GENB, and ECEV.

0101	Carlos Machado	Seats (Total: 100)
	TuTh 11:00am - 12:15pm	PLS 1140

BSCI374 Mathematical Modeling in Biology

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH131, MATH136, or MATH141. Cross-listed with HLSC374. Credit only granted for: BSCI374, BSCI474, or HLSC374. Formerly: BSCI474. Additional information: The HLSC374 version of this course is restricted to students in the Honors College Integrated Life Sciences program.

Students will learn empowering mathematical techniques through the understanding of biological models. Models are chosen from a variety of biological disciplines. Mathematical skills that will be developed along the way include: solving non-linear difference equations, eigenvector analysis, and the implementation of these algorithms as computer models.

(Sponsoring Dept.: BIOL). Applies as an upper-level laboratory course to Biological Sciences Specialization Areas: GENB, ECEV, and PHNB.

0101	Jonathan Simon	Seats (Total: 10)
	TuTh 9:30am - 10:45am	CCC 1105
	M 1:00pm - 3:50pm	CCC 1111 Lab

BSCI374H Mathematical Modeling in Biology

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH131, MATH136, or MATH141. Cross-listed with HLSC374. Credit only granted for: BSCI374, BSCI474, or HLSC374. Formerly: BSCI474. Additional information: The HLSC374 version of this course is restricted to students in the Honors College Integrated Life Sciences program.

Students will learn empowering mathematical techniques through the understanding of biological models. Models are chosen from a variety of biological disciplines. Mathematical skills that will be developed along the way include: solving non-linear difference equations, eigenvector analysis, and the implementation of these algorithms as computer models.

(Sponsoring Dept.: BIOL). Applies as an upper-level laboratory course to Biological Sciences Sciences Specialization Areas: GENB, ECEV, and PHNB.

0101	Jonathan Simon	Seats (Total: 5)	
	TuTh 9:30am - 10:45am	CCC 1105	
	M 1:00pm - 3:50pm	CCC 1111	Lab

BSCI378H Cell Biology and Molecular Genetics Department Honors Seminar

(Perm req)

Credits: 1 Grading Method: Regular

Required seminar for all students participating in departmental honors research program.

(Sponsoring Dept.: CBMG). Restricted to students participating in the CBMG Departmental Honors Program. If you are interested in a CBMG Departmental Honors Research experience, please see the CBMG department web site for detailed information.

Click here for more course information.

0101	Louisa Wu	Seats (Total: 19)	
	F 2:00pm - 2:50pm	HJP 1216	

BSCI379G Cell Biology and Molecular Genetics Department Research; Research in Cell Biology and Molecular Genetics

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

This course is arranged to provide qualified majors an opportunity to pursue research problems under the supervision of a member of the department.

Prerequisite: permission of department. See CBMG department Undergraduate office. (Sponsoring Dept: CBMG).

Contact department for information to register for this course.

BSCI379H**Cell Biology and Molecular Genetics Department Honors Research**

(Perm req)

Credits: 1-3 Grading Method: Regular

Student should consult program guidelines. Research project carried out under guidance of faculty advisor.

Corequisite: BSCI378H. Restricted to students participating in the CBMG Departmental Honors Program. (Sponsoring Dept.: CBMG).

Click here for more course information.

Contact department for information to register for this course.

BSCI379L**Cell Biology and Molecular Genetics Department Research; Lab Research**

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

This course is arranged to provide qualified majors an opportunity to pursue research problems under the supervision of a member of the department.

Any combination of 3 credits of BSCI 379G, BSCI 379L, and BSCI 379H can be used to satisfy the enrichment requirement in CEBG, ECEV, MICB, or PHNB or an upper-level elective in GENB. Students must have successfully completed at least one semester in a Cell Biology & Molecular Genetics department research lab before getting permission to take BSCI 379L in the same lab. Students completing at least 4 credits of laboratory research including at least one semester taking BSCI 379L may substitute this experience for one of the two upper-level laboratory courses required to complete any BSCI major.

Contact department for information to register for this course.

BSCI389**Entomology Department Research**

(Perm req)

Credits: 1-2 Grading Method: Regular,
Pass-Fail, Audit

Credit to be determined by the department. Should be taken during the junior year. Investigations of assigned entomological problems. No more than 4 credit hours of BSCI389 may be applied to the 120 credit hours needed for the Bachelor's degree.

(Sponsoring Dept.: ENTM).

Contact department for information to register for this course.

BSCI389H**Entomology Department Honors Research**

(Perm req)

Credits: 1-2 Grading Method: Regular

(Sponsoring Dept.: ENTM).

Contact department for information to register for this course.

BSCI389L Entomology Department Research; Lab Research

(Perm req)

Credits: 1-2 Grading Method: Regular,
Pass-Fail, Audit

Credit to be determined by the department. Should be taken during the junior year. Investigations of assigned entomological problems. No more than 4 credit hours of BSCI389 may be applied to the 120 credit hours needed for the Bachelor's degree.

Contact department for information to register for this course.

BSCI398H Biology Department Honors Seminar

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Required seminar for all students participating in departmental honors research program.

(Sponsoring Dept. :BIOL).

0101	Marjorie Reaka	Seats (Total: 35)
	M 4:00pm - 5:00pm	BPS 1208

BSCI399 Biology Department Research; Biology Department Research

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Research and/or integrated reading in biology under the direction and close supervision of a member of the faculty.

(Sponsoring Dept: BIOL)

Contact department for information to register for this course.

BSCI399H Biology Department Honors Research

(Perm req)

Credits: 1-2 Grading Method: Regular

A laboratory research problem; required each semester during honors participation and culminating in an honors thesis.

(Sponsoring Dept: BIOL).

Contact department for information to register for this course.

BSCI399L Biology Department Research; Biology Lab Research

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Research and/or integrated reading in biology under the direction and close supervision of a member of the faculty.

Contact department for information to register for this course.

BSCI404 **Cell Biology from a Biophysical Perspective**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BSCI330. Recommended: PHYS121 and PHYS122; or completion of PHYS131 and PHYS132 recommended. Jointly offered with BIOL704, BIPH704. Credit only granted for: BSCI338O, BSCI404, BIOL704, BIOL708O, or BIPH704. Formerly: BSCI338O.

An approach to cell biology by focusing on mechanisms and unifying physical paradigms. It will not assume a great deal of factual biological knowledge, but will expect a background that prepares students to think mechanistically and quantitatively.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: CEBG (Cell Biology), GENB (Cell Biology, Development, Physiology), and PHNB.

0101	Sergei Sukharev	Seats (Total: 15)
	TuTh 3:30pm - 4:45pm	PLS 1113

BSCI405 **Population and Evolutionary Genetics**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI222; and 1 course with a minimum grade of C- from (MATH131, MATH136, MATH141). Jointly offered with BIOL709. Credit only granted for: BSCI405, BSCI339J, or BIOL709C. Formerly: BSCI339J.

Genetic variation within a population provides the basis for future evolution as well as a record of past evolution. The genomics revolution provides data on this variation that, together with mathematical models, allow us to read this record to reconstruct evolutionary trajectories. Examples will focus on hominin and pathogen evolution. In the lab, students will use models to explore how genetic variation (allele frequencies) changes over time and space.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: CEBG (Genetics), ECEV, and (Genetics & Evolution).

0101	Philip Johnson	Seats (Total: 20)
	MW 11:00am - 11:50am	HBK 0123
	F 10:00am - 11:50am	PLS 1121 Lab

BSCI410 **Molecular Genetics**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BSCI222. And must have completed CHEM233; or (CHEM231 and CHEM232).

An advanced genetics course emphasizing the molecular basis of gene structure and function in the context of modern approaches to the genetics of humans and model organisms.

(Sponsoring Dept.: CBMG). Acceptable toward Biological Sciences specialization areas: PHNB, MICB, CEBG, GENB and CMBG.

0101	Stephen Mount	Seats (Total: 140)
	TuTh 11:00am - 12:15pm	BPS 1250

BSCI411 Bioinformatics and Integrated Genomics

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI222. Recommended: BSCI410. Credit only granted for: BSCI380 or BSCI411. Formerly: BSCI380.

Computational methods for the study of biological sequence data in comparative biology and evolution. Analysis of genome content and organization. Database searching, pairwise and multiple sequence alignment, phylogenetic, methods, pattern recognition, and functional inference. Functional and comparative genomics approaches.

(Sponsoring Dept.: CBMG). Acceptable to Biological Specialization Areas: CEBG, MICB, and GENB. Students must pay a \$40.00 Laboratory Materials fee.

0101	Najib El-Sayed	Seats (Total: 25)
	MWF 10:00am - 10:50am	MCB 1207
	M 2:00pm - 4:50pm	PLS 1121 Lab
0102	Najib El-Sayed	Seats (Total: 25)
	MWF 10:00am - 10:50am	MCB 1207
	W 2:00pm - 4:50pm	PLS 1121 Lab

BSCI411H Bioinformatics and Integrated Genomics

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI222. Recommended: BSCI410. Credit only granted for: BSCI380 or BSCI411. Formerly: BSCI380.

Computational methods for the study of biological sequence data in comparative biology and evolution. Analysis of genome content and organization. Database searching, pairwise and multiple sequence alignment, phylogenetic, methods, pattern recognition, and functional inference. Functional and comparative genomics approaches.

(Sponsoring Dept.: CBMG). Acceptable to Biological Specialization Areas: CEBG, MICB, and GENB. Students must pay a \$40.00 Laboratory Materials fee.

0101	Najib El-Sayed	Seats (Total: 25)		
	MWF 10:00am - 10:50am	MCB 1207		
	M 2:00pm - 4:50pm	PLS 1121	Lab	
0102	Najib El-Sayed	Seats (Total: 25)		
	MWF 10:00am - 10:50am	MCB 1207		
	W 2:00pm - 4:50pm	PLS 1121	Lab	

BSCI414 Recombinant DNA Laboratory

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BSCI222.

An advanced course offering hands-on experience in performing recombinant DNA experiments. All current molecular biology techniques used for cloning prokaryotic genes, analyzing the gene products, and modifying the genes will be performed. Techniques include isolation of DNA, use of restriction enzymes; cloning procedures, PCR analysis, and Southern hybridizations. Lecture material focuses on interpretation of results generated in the laboratory.

(Sponsoring Dept.: CBMG). Acceptable toward Biological Sciences Specialization Areas: PHNB, MICB, CEBG and GENB. Students must pay a \$40.00 laboratory materials fee.

0101	Caren Chang	Seats (Total: 18)		
	TuTh 2:00pm - 5:00pm	MCB 1135	Lab	
SG91	Harlan King	Seats (Total: 40)		
	TuTh 9:30am - 10:45am	BLD2 3012	Lab	
	F 1:00pm - 5:00pm	BLD2 4012	Lab	

BSCI415 Molecular Genetics Laboratory

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in BSCI410. Restriction: Junior standing or higher. Credit only granted for: BSCI348G or BSCI415. Formerly: BSCI348G.

Problem solving laboratory organized around extended projects that employ different approaches toward linking gene and function.

(Sponsoring Dept.: CBMG). Specialization Areas: CEBG and GENB. Students must pay a \$40.00 laboratory materials fee.

0101	David Straney	Seats (Total: 20)	
	TuTh 2:00pm - 5:00pm	MCB 3123	Lab

BSCI416 Human Genetics

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: Minimum grade of C- in BSCI410. Recommended: BSCI330.

Approaches to human genetics and applications to biology and medicine focusing on specific human genetic topics using primary research papers as the main resource.

(Sponsoring Dept.: CBMG).

Contact department for information to register for this course.

BSCI420 Cell Biology Lectures

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI330, BSCI222, CHEM231, and CHEM232. Credit only granted for: BSCI420 or BSCI421.

Molecular and biochemical bases of cellular organization and function in eukaryotes.

(Sponsoring Dept: CBMG). Specialization Areas: PHNB, CEBG, and GENB. Cross-listed with BSCI420. Credit only granted for BSCI420 or CBMG688C.

0101	Norma Andrews	Seats (Total: 60)	
	TuTh 12:30pm - 1:45pm	PLS 1130	

BSCI424 Pathogenic Microbiology

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: BSCI223.

The role of bacteria and fungi in the diseases of humans with emphasis upon the differentiation and culture of microorganisms, types of disease, modes of disease transmission, prophylactic, therapeutic, and epidemiological aspects.

(Sponsoring Dept.: CBMG). Acceptable toward Biological Sciences Specialization Areas: MICB and GENB (Category 2). Students must pay a \$40.00 laboratory materials fee.

0101	Volker Briken	Seats (Total: 18)
	TuTh 11:00am - 11:50am	MCB 1207
	MW 11:00am - 12:50pm	MCB 1143 Lab
0102	Volker Briken	Seats (Total: 18)
	TuTh 11:00am - 11:50am	MCB 1207
	MW 1:00pm - 2:50pm	MCB 1143 Lab

BSCI430 Developmental Biology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BSCI222 and BSCI330.

Structural, functional and regulatory events and mechanisms that operate during development to produce an integrated, multicellular organism composed of a multitude of differentiated cell types.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: CEBG(Cell Biology), ECEV, GENB (Cell Biology, Development, Physiology) and PHNB.

0101	William Jeffery	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	BPS 1236

BSCI433 Biology of Cancer

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BSCI222 and BSCI330; or permission of CMNS-Biological Sciences UG Program.

Causes and consequences of neoplastic transformations at the biochemical and cellular levels.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences specialization areas: CEBG, GENB (Cell Biology, Development, Physiology), and PHNB.

0101	Beth Parent	Seats (Total: 45)
	TuTh 9:30am - 10:45am	BPS 1236

BSCI437**General Virology**

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Prerequisite: BSCI222; or permission of CMNS-Biological Sciences UG Program. Restriction: Junior standing or higher.

Discussion of the physical and chemical nature of viruses, virus cultivation and assay methods, virus replication, viral diseases with emphasis on the oncogenic viruses, viral genetics, and characteristics of the major virus groups.

(Sponsoring Dept.: CBMG). Acceptable toward Biological Sciences Specialization Areas: GENB, MICB and CEBG.

0101	Margaret Scull	Seats (Total: 60)
	MWF 11:00am - 11:50am	BPS 1243

BSCI440**Mammalian Physiology**

Credits: 4 Grading Method: Regular,
 Pass-Fail, Audit

Prerequisite: BSCI330; and (CHEM231 and CHEM232; or must have completed CHEM233). Or permission of CMNS-Biological Sciences UG Program.

A study of the cardiovascular, hemopoietic, gastrointestinal, renal and respiratory systems. Chemical and endocrine regulation of physiological functions in mammals. Course does not count as an upper level lab for BIOL majors (see BSCI441).

(Sponsoring Dept.: BIOL). Applies to Biological Sciences Specialization Areas: PHNB and GENB. BSCI 440 is a lecture/discussion format course. The laboratory is offered separately as BSCI 441.

0101	Joshua Singer	Seats (Total: 30)
	MWF 10:00am - 10:50am	JMZ 0220
	M 11:00am - 12:50pm	BPS 0283 Discussion
0102	Joshua Singer	Seats (Total: 30)
	MWF 10:00am - 10:50am	JMZ 0220
	M 2:00pm - 3:50pm	BPS 1236 Discussion
0103	Joshua Singer	Seats (Total: 30)
	MWF 10:00am - 10:50am	JMZ 0220
	M 2:00pm - 3:50pm	BPS 1238 Discussion

0104	Joshua Singer MWF 10:00am - 10:50am Th 8:00am - 9:50am	Seats (Total: 30) JMZ 0220 BPS 1228	Discussion
1101	Colenso Speer MWF 2:00pm - 2:50pm M 11:00am - 12:50pm	Seats (Total: 30) BPS 1250 PLS 1111	Discussion
1102	Colenso Speer MWF 2:00pm - 2:50pm Tu 8:00am - 9:50am	Seats (Total: 30) BPS 1250 PLS 1113	Discussion
1103	Colenso Speer MWF 2:00pm - 2:50pm W 10:00am - 11:50am	Seats (Total: 30) BPS 1250 PLS 1113	Discussion
1104	Colenso Speer MWF 2:00pm - 2:50pm W 11:00am - 12:50pm	Seats (Total: 30) BPS 1250 PLS 1111	Discussion

BSCI441

Mammalian Physiology Laboratory

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in BSCI440.

Laboratory exercises in experimental mammalian physiology.

(Sponsoring Dept.: BIOL). Applies to Biological Sciences Specialization Areas: PHNB and GENB.
Students must pay a \$40.00 laboratory materials fee.

0101	Carmen Cantemir-Stone F 12:00pm - 12:50pm Tu 2:00pm - 5:50pm	Seats (Total: 20) BPS 1243 PLS 1181	Lab
0102	Carmen Cantemir-Stone F 12:00pm - 12:50pm W 2:00pm - 5:50pm	Seats (Total: 20) BPS 1243 PLS 1181	Lab

BSCI443

Microbial Physiology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI223. And minimum grade of C- in BCHM461; or minimum grade of C- in BCHM463.

Microbial cellular and population growth. Fermentation metabolism, physiology of anaerobiosis, and energy conservation and transformation in bacterial membranes. Efficiency of energy utilization for growth. Membrane structure and transport. Bacterial chemotaxis. Regulation of bacterial chromosome replication, RNA and protein synthesis. Control of metabolic pathways.

(Sponsoring Dept.: CBMG).

0101	Jiqiang Ling	Seats (Total: 50)
	MW 11:00am - 12:15pm	MCB 1207

BSCI444 Comparative Physiology

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Minimum grade of C- in BSCI440. Restriction: Must be in a major in USG-Universities at Shady Grove; and must be in Biological Sciences: Physiology & Neurobiology program.

Exploration of the adaptations of physiological systems that allow animals to thrive in extreme and unusual environments.

SG91	David Sandstrom	Seats (Total: 40)
	MW 11:00am - 12:15pm	BLD2 1022

BSCI447 General Endocrinology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BSCI330, CHEM241, and CHEM242.

Functions and dysfunctions of the endocrine system with special reference to mammals.

(Sponsoring DEPT.: BIOL). Specialization Areas: PHNB and GENB.

0101	Justicia Opoku-Edusei	Seats (Total: 70)
	MWF 10:00am - 10:50am	BPS 1243

BSCI452 Diseases of the Nervous System

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI330; and minimum grade of C- in BSCI353. Jointly offered with NACS728, BIOL708. Credit only granted for: BSCI452, BSCI338N, BIOL708E, or NACS728N. Formerly: BSCI338N.

An advanced course covering the neuroanatomy, function, and organization of the nervous system and its implication for pathology and disease.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: GENB and PHNB.

0101	Quentin Gaudry	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	BPS 1236

BSCI454 Neurobiology Laboratory

Credits: 1 Grading Method: Regular

Prerequisite: Minimum grade of C- in BSCI330; and must have completed or be concurrently enrolled in BSCI353; and must have completed or be concurrently enrolled in PHYS122, PHYS132, or PHYS142.

Basic neuroanatomical techniques, intracellular and extracellular recordings of electrical potentials from nerve and muscle.

(Sponsoring Dept.: BIOL). Specialization areas: CEBG, PHNB, and GENB. Students must pay a \$40.00 laboratory materials fee.

0101	Amanda Chicoli, Hilary Bierman	Seats (Total: 20)	
	M 1:00pm - 4:00pm	BPS 0257	Lab
0102	Amanda Chicoli, Hilary Bierman	Seats (Total: 20)	
	Tu 2:00pm - 5:00pm	BPS 0257	Lab
0103	Amanda Chicoli, Hilary Bierman	Seats (Total: 20)	
	W 1:00pm - 4:00pm	BPS 0257	Lab
0105	Amanda Chicoli, Hilary Bierman	Seats (Total: 20)	
	Th 2:00pm - 5:00pm	BPS 0257	Lab

BSCI464 Microbial Ecology

Credits: 3 Grading Method: Regular, CORE: CS
 Pass-Fail, Audit

Prerequisite: BSCI223 and CHEM241. And must have completed CHEM243; or CHEM242.

Interaction of microorganisms with the environment, other microorganisms and with higher organisms. Roles of microorganisms in the biosphere. Microorganisms and current environmental problems.

0101	Charles Delwiche	Seats (Total: 35)
	MW 12:30pm - 1:45pm	ESJ 1309

BSCI467

Freshwater Biology

Credits: 4 Grading Method: Regular,
Pass-Fail

Biology and ecology of freshwater invertebrates in lotic and lentic habitats, their adaptation to aquatic life, their function in aquatic ecosystems, and their relationship to environmental deterioration. Laboratory will include field trips, demonstrations, and identifications.

(Sponsoring Dept.: ENTM). Specialization Areas: ECEV and GENB. Students must pay a \$40.00 laboratory materials fee.

0101	William Lamp	Seats (Total: 24)
	MWF 1:00pm - 1:50pm	BPS 0283
	W 2:00pm - 4:50pm	PLS 1161 Lab
0102	William Lamp	Seats (Total: 24)
	MWF 1:00pm - 1:50pm	BPS 0283
	Th 2:00pm - 4:50pm	PLS 1161 Lab

BSCI471

Molecular Evolution

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BSCI222; or permission of CMNS-Biology department.

Patterns of DNA sequence variation within and between species, caused by nucleotide changes and the movement of transposable elements. Theories of molecular evolution, such as the neutral theory. Molecular clock hypothesis: its importance as a practical empirical tool in molecular genetics and systematics and its theoretical foundation.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences Specialization Areas: ECEV and GENB (Genetics & Evolution).

0101	Michael Cummings	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

BSCI475

Sexual Selection in Nature

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI207; or permission of instructor. Recommended: BSCI360 or BSCI370. Jointly offered with BIOL 708. Credit only granted for: BSCI338X, BSCI475, or BIOL708X. Form uly: BSCI338X.

Sexual selection drives some of the most spectacular, if not bizarre, traits in nature. We will explore how organisms select and compete for mates and fertilization success, and how this powerful and pervasive evolutionary force shapes sexual traits and regulates species boundaries. We will focus on the key theories in the field and discuss recent and classic research papers. This is a student-directed class: course topics and materials will be selected based on student interests and involvement. On occasion, experts in the field will be invited to class to discuss their research.

(Sponsoring Dept.: BIOL). Acceptable toward Biological Sciences speciali zation areas: ECEV and GENB (Ecology, Behavioral & Organismal).

0101	Heidi Fisher	Seats (Total: 18)
	TuTh 3:30pm - 4:45pm	BPS 1228

BSCI483 Insects, Pathogens, and Public Health

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BSCI207.

Mosquito- and tick-borne disease transmission poses significant challenges to human health and well-being globally, and is on the rise in North America. Arthropod parasites and the pathogens they transmit to humans and animals will be introduced, and the public health significance of these arthropods will be examined. The ecology and behavior of vectors in relation to disease transmission will be emphasized.

(Sponsoring Dept.: ENTM).

0101	Megan Fritz	Seats (Total: 25)
	MWF 9:00am - 9:50am	PLS 1161

BSCI497 Insect Pests of Ornamentals and Turf

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

The recognition, biology and management of insects and mites injurious to ornamental shrubs, trees, greenhouse crops, and turf. Emphasis on Integrated Pest Management (IPM).

(Sponsoring Dept.: ENTM).

0101	Paula Shrewsbury, Karin Burghardt	Seats (Total: 24)	
	TuTh 9:30am - 10:45am	PLS 1111	
	M 1:00pm - 4:00pm	PLS 1161	Lab

BSCV

CIVICUS

Fall 2019

BSCV181

Civics Student and the University

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Freshman standing; and must be in the Civics program. Credit only granted for: BSOS181 or BSCV181. Formerly: BSOS181.

Knowledge and skills designed to utilize CIVICUS to enhance the college experience and preparation for civic engagement.

0101	Julie Randolph	Seats (Total: 27)
	M 2:00pm - 3:45pm	SOM 0101
0201	Julie Randolph	Seats (Total: 26)
	M 4:00pm - 5:45pm	SOM 0101

BSCV191

Introduction to Civics

Credits: 3 Grading Method: Regular

Restriction: Must be in the Civics program. Credit only granted for: BSCV191 or BSOS191. Formerly: BSOS191.

An introduction to the social and historical foundations of a civil society. An examination of the roles of individuals, groups, social institutions and community services.

0101	Korey Rothman	Seats (Total: 27)
	TuTh 9:30am - 10:45am	SOM 0101
0201	Korey Rothman	Seats (Total: 27)
	TuTh 2:00pm - 3:15pm	SOM 0101

BSCV301

Leadership in a Multicultural Society

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

General Education: DVCC

Prerequisite: BSCV191, SOCY105, and BSCV181. Restriction: Sophomore standing or higher. Credit only granted for: BSOS301 or BSCV301. Formerly: BSOS301.

A study and application of skills, historical context, theories, and concepts for constructive leadership in a pluralistic, multicultural, and diverse society. Social science methodologies and theories will provide the structure for the study of contemporary social problems, civil society issues, and leadership practices.

0201	Julie Randolph	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	SOM 0101
0301	Nicole Mehta	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	SOM 0101

BSCV309**Civics Seminar**

(Perm req)

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

Review and analysis of contemporary social issues.

Contact department for information to register for this course.

BSGC**Global Communities****Fall 2019****BSGC100****The Student in the University: Global Communities**

(Perm req)

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be enrolled in Global Communities Living-Learning Program. By Permission Only (BPO).

Students will develop a sense of community within the program, become familiar with campus resources, gain skills and information to prepare for the Global Experience Semester, and explore the surrounding international community.

0101	Jamila Aswad	Seats (Total: 22)
	Tu 9:30am - 10:45am	DOR 0134
0102	Natalie Vinski Ibrahim	Seats (Total: 22)
	Tu 11:00am - 12:15pm	DOR 0134
0103	Jeremy Gombin-Sperling	Seats (Total: 22)
	Tu 2:00pm - 3:15pm	DOR 0134

BSGC101**Globalization**

(Perm req)

Credits: 3

Grading Method: Regular

CORE: SB

General Education: DSHS,
SCIS*Restriction: Must be in Global Communities Living-Learning program.**An interdisciplinary exploration of the historical evolution and contemporary significance of growing interconnectedness in the world. We debate different perspectives on globalization and its impact on social, political, economic and cultural issues.*

0101	Virginia Haufler	Seats (Total: 22)	
	Tu 3:30pm - 4:45pm	ESJ 1202	
	Th 9:30am - 10:45am	DOR 0134	Discussion
0102	Virginia Haufler	Seats (Total: 22)	
	Tu 3:30pm - 4:45pm	ESJ 1202	
	Th 11:00am - 12:15pm	DOR 0134	Discussion
0103	Virginia Haufler	Seats (Total: 22)	
	Tu 3:30pm - 4:45pm	ESJ 1202	
	Th 2:00pm - 3:15pm	DOR 0134	Discussion

BSGC302**BSGC 302 Capstone: Global Connections**

(Perm req)

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit*Restriction: Must be in Global Communities Living-Learning program. By permission only (BPO). Additional information: This course is limited to second-year students in the Global Communities Living-Learning Program who have completed or are in the midst of completing their Global Experience requirement.**Final component of the Global Communities curriculum. The course connects the global experience with previous BSGC coursework.***Contact department for information to register for this course.****BSGC399****Topical Investigations in Global Communities**

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit*Variable from 1-3 credits and repeatable up to 6 if content varies.*

0101	Virginia Haufler	Seats (Total: 10)	
	Class time/details on ELMs	ONLINE	

BSOS233**Data Science for the Social Sciences**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit*Restriction: Must be enrolled in a BSOS major; or permission of instructor.*

An introduction to modern methods of data analysis for social scientists. This course emphasizes teaching students who have no previous coding experience how to analyze data and extract meaning in a social science context. Students will gain critical programming skills and learn inferential thinking through examples and projects with real-world relevance.

0101

Brian Kim, Yan Li

Seats (Total: 25)

TuTh 12:30pm - 1:45pm

ASY 3207

BSOS248A**Leadership Seminar I; Ambassadors**

(Perm req)

Credits: 2

Grading Method: Regular,
Pass-Fail, Audit

A topics course in the behavioral and social sciences designed to develop student leaders with skills that will address important issues of the college and offers diverse viewpoints intended to challenge common perceptions of leadership, technology programs and communication.

Contact department for information to register for this course.

BSOS248D**Leadership Seminar I; Dean's Student Advisory Council**

(Perm req)

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

A topics course in the behavioral and social sciences designed to develop student leaders with skills that will address important issues of the college and offers diverse viewpoints intended to challenge common perceptions of leadership, technology programs and communication.

Contact department for information to register for this course.

BSOS248P**Leadership Seminar I; Peer Mentor Seminar I**

(Perm req)

Credits: 1

Grading Method: Regular

A topics course in the behavioral and social sciences designed to develop student leaders with skills that will address important issues of the college and offers diverse viewpoints intended to challenge common perceptions of leadership, technology programs and communication.

Contact department for information to register for this course.

BSOS258D Leadership Practicum I; Dean's Student Advisory Council

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

This course puts into practice the elements and skills learned in the seminar series that directly benefit the college.

Contact department for information to register for this course.

BSOS258L Leadership Practicum I; DSAC Officers

(Perm req)

Credits: 1 Grading Method: Regular

This course puts into practice the elements and skills learned in the seminar series that directly benefit the college.

Repeatable to 9 credits.

Contact department for information to register for this course.

BSOS258P Leadership Practicum I; Peer Mentors

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

This course puts into practice the elements and skills learned in the seminar series that directly benefit the college.

Contact department for information to register for this course.

BSOS288I Special Topics in Behavioral and Social Sciences; Internship Practicum in the Social Sciences

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Introductory special topics course focusing on an interdisciplinary topic related to behavioral and social sciences.

Contact department for information to register for this course.

BSOS288V Special Topics in Behavioral and Social Sciences; Technology Apprentice Program

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Introductory special topics course focusing on an interdisciplinary topic related to behavioral and social sciences.

Restricted to BSOS students. Technical skills and pedagogical basics needed to support faculty uses of technology in the classroom. Web publishing, academic website development, creating/using digitized media, electronic presentation tools, and discussion group facilitation. The class will usually meet face-to-face for two and one-half hours per week; however, three or four times per semester, the class will meet online instead. Students will interact and be assessed on their participation in an online environment. For permission to enroll or more information, please contact Margaret Weber at mweber@bsos.umd.edu.

Contact department for information to register for this course.

BSOS289I

Playing the Market: Managing Risk and Using Technical Analysis

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS, DSSP, SCIS

Through readings, class discussion, guest lecturers, and a simulated portfolio construction and class trading competition, this course will introduce students to investing and trading, with special emphasis on the field of technical analysis. The technical approach to the markets focuses largely on the analysis of price and volume patterns as indicators of stock trends. Students will learn how to evaluate companies using internet sources and a technical analysis program. Each student will be expected to use a set of trading rules to apply to their trading of a virtual \$100,000 margin portfolio and to manage risk. Students will develop an accurate view of the risks and benefits of trading stocks and an appreciation of the complexities involved in the technical approach to trading stocks. The course assumes no prior knowledge of the stock market.

FC01	David McCandlish, Eric Wish	Seats (Total: 94)
	F 1:00pm - 4:00pm	SHM 2102
<i>Restricted to students in Freshmen Connection.</i>		

BSOS330

Programming for the Social Sciences: Statistical Computing using R

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Students must have completed a least one college-level statistics course. Restriction: Must not have completed BSOS230; and must be enrolled in a BSOS major. Or permission of instructor. Additional information: This course is for students who have some prior experience working with R. For students with no prior experience, BSOS230 is recommended.

R is an open-source programming language, specialized for statistical computing, and provides a variety of statistical and graphical techniques that might be relevant for any BSOS program, such as descriptive statistics, linear and non-linear regression, text mining, image processing. The R language is increasingly often employed in advanced statistics and data analytics, offering a wide range of application packages for effective programming. This course introduces the R language and several powerful packages in form of lectures, worked-out examples, and group exercises.

Non-BSOS majors should contact fklein@umd.edu for permission to register.

0101	Franz Klein	Seats (Total: 18)
	M 4:00pm - 6:00pm	LEF 0227
<i>This section is for students who have some prior programming experience</i>		
0201	Franz Klein	Seats (Total: 21)
	W 4:00pm - 6:00pm	LEF 0227
<i>This section is for students who have NO prior programming experience.</i>		

BSOS355

Social Sciences Internship Practicum

(Perm req)

Credits: 3

Grading Method: Regular

General Education: DSSP

Restriction: Must have earned a minimum of 60 credits; and minimum cumulative GPA of 2.5; and must have completed at least 1 semester at UMD. Credit only granted for: BSOS388I or BSOS355.

Formerly: BSOS388I.

BSOS 355 is an internship course open to all majors. It will enable students to articulate and apply the scholarship from the discipline related to their specific internship placement into a real-work environment.

0101	Kathryn Hopps	Seats (Total: 30)
Contact instructor or department for details.		

BSOS358A

Leadership Practicum II; Ambassadors

(Perm req)

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

This course puts into practice the advanced skills and elements learned in the seminar series that directly benefit the college.

Contact department for information to register for this course.

BSOS358P

Leadership Practicum II; Peer Mentors

(Perm req)

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

This course puts into practice the advanced skills and elements learned in the seminar series that directly benefit the college.

Contact department for information to register for this course.

BSOS386

Experiential Learning

(Perm req)

Credits: 3-6

Grading Method: Regular,
Pass-Fail

Contact department for information to register for this course.

BSOS388B Behavioral and Social Sciences Special Topics; Innovation and Social Change: Do Good Now

Credits: 3 Grading Method: Regular, General Education: DSSP,
Pass-Fail, Audit SCIS

Advanced special topics course focusing on an interdisciplinary topic related to the Behavioral and Social Sciences.

Restriction: Open to BSOS majors only. Learn about the field of social innovation and entrepreneurship through this dynamic and unique class. Explore social change by studying leaders in the field, case studies and popular text. Engage with small teams of like-minded students to create and implement projects that benefit society. Combine the imagination and creativity of transformative action for social good with the pragmatic approach of entrepreneurship and innovation, providing you an opportunity to make an impact for a cause or issue of your choice. Course projects include participation in a social impact prize competition where teams have the chance to win money for the solutions they develop.

0101	Tricia Homer	Seats (Total: 30)
	Tu 3:00pm - 5:30pm	HBK 0109

BSOS388E Behavioral and Social Sciences Special Topics; CIDCM Minor Practicum

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Advanced special topics course focusing on an interdisciplinary topic related to the Behavioral and Social Sciences.

Contact department for information to register for this course.

BSOS388M Behavioral and Social Sciences Special Topics; Social Science Independent Research

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Advanced special topics course focusing on an interdisciplinary topic related to the Behavioral and Social Sciences.

Contact department for information to register for this course.

BSOS388Q Behavioral and Social Sciences Special Topics; Cesar Directed Study

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Advanced special topics course focusing on an interdisciplinary topic related to the Behavioral and Social Sciences.

Contact department for information to register for this course.

BSOS388T Behavioral and Social Sciences Special Topics; BSOS Sustainability Task Force

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Advanced special topics course focusing on an interdisciplinary topic related to the Behavioral and Social Sciences.

Restriction: BSOS Majors Only.

0101	Evan Ellicott	Seats (Total: 20)
	M 4:00pm - 6:00pm	TYD 3100

BSOS399 Directed Study in Behavioral and Social Sciences

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Guidance for the advanced student capable of interdisciplinary study on special projects under the supervision of the Assistant Dean for Student Affairs.

Contact department for information to register for this course.

BSOS399T Directed Study in Behavioral and Social Sciences; Civicus Teaching Assistant

(Perm req)
Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Guidance for the advanced student capable of interdisciplinary study on special projects under the supervision of the Assistant Dean for Student Affairs.

Contact department for information to register for this course.

BSOS448C Teaching Assistant Practicum; Civicus

(Perm req)
Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Supervised practicum for teaching assistants for BSOS/UNIV courses.

Contact department for information to register for this course.

BSOS448I Teaching Assistant Practicum; Internship

(Perm req)
Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Supervised practicum for teaching assistants for BSOS/UNIV courses.

Contact department for information to register for this course.

BSOS448T**Teaching Assistant Practicum; (UNIV)**

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit*Supervised practicum for teaching assistants for BSOS/UNIV courses.***Contact department for information to register for this course.****BSOS630****Programming for the Social Sciences: Statistical Computing using R**

Credits: 1

Grading Method: Regular,
Audit*Prerequisite: Students must have completed a least one college-level statistics course. Restriction: Must be enrolled in a BSOS graduate program; or permission of instructor. Jointly offered with BSOS330. Credit only granted for: BSOS330 or BSOS630.**R is an open-source programming language, specialized for statistical computing, and provides a variety of statistical and graphical techniques that might be relevant for any BSOS program, such as descriptive statistics, linear and non-linear regression, text mining, image processing. The R language is increasingly often employed in advanced statistics and data analytics, offering a wide range of application packages for effective programming. This course introduces the R language and several powerful packages in form of lectures, worked-out examples, and group exercises.*

0101	Franz Klein	Seats (Total: 5)
	M 4:00pm - 6:00pm	LEF 0227

BSST**Terrorism Studies****Fall 2019****BSST240****Understanding The Principles and Perils of CBRN Weapons**

Credits: 3

Grading Method: Regular

General Education: DSNL (if
taken with BSST241), DSNS*Additional information: If taken in the same term as BSST241 these courses will count for General Education Natural Sciences Lab.**Explores the 'dark side' of scientific applications. Students will gain an understanding of CBRN Weapons, through the exploration of the scientific method, and certain fundamental principles of chemistry, biology, and physics. Students will also learn how to test hypotheses, use basic statistics, interpret results, and apply their new knowledge through discussions of practical applications in the domains of public health, emergency management, epidemiology, and threat assessment. Bringing these fields together in one class will allow students to better understand the use of and threat from CBRN weapons in terrorism.*

FC01	Steve Sin	Seats (Total: 20)
	TuTh 4:30pm - 5:45pm	JMZ 1124
<i>Restricted to students in Freshmen Connection.</i>		

BSST241 Understanding the Principles and Perils of CBRN Weapons (Lab)

Credits: 1 Grading Method: Regular

Corequisite: BSST240. Additional information: This is an optional 1-credit lab course offered in coordination with BSST240. If taken in the same term as BSST240 these courses will count for General Education Natural Sciences Lab.

An exploration of the threat of Chemical, Biological, Radiological, and Nuclear (CBRN) weapons aimed to provide students with a basic, multidisciplinary, natural science foundation in chemistry, biology, and physics.

FC01	Steve Sin	Seats (Total: 20)	
	F 10:00am - 12:30pm	CHE 2116	Lab
<i>Restricted to students in Freshmen Connection.</i>			

BSST288R Special Topics in Terrorism Studies; Special Topics in Terrorism Studies: Global Terrorism in the Twentieth and Twenty-First Century

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

0101	Howard Smead	Seats (Total: 5)
	M 4:00pm - 6:30pm	TLF 1103
<i>To obtain permission to register for this course, send a copy of your resume and unofficial transcript to toeducation@start.umd.edu. Include BSST288R in the subject line of your email.</i>		

BSST327 Introduction to Terrorism and the Terrorist Threat

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Recommended: It is recommended that BSST330 be taken in the same semester as BSST329. Restriction: Restricted to students enrolled in the Global Terrorism Minor (#BS07). Credit only granted for: BSST327 OR BSST399K. Formerly: BSST399K.

This course focuses on bringing current events and policy issues related to terrorism and counterterrorism, as they are discussed in mass media, into the dialogue with academic theories and research. Through a discussion-based seminar, students will bring current, terrorism-related events to classroom discussion, where they will consider the media-framed current events in relation to academic research. Students will be continually challenged to draw connections between terrorism-related events in the news and relevant academic research.

0101	William Braniff	Seats (Total: 35)
	Th 3:30pm - 5:10pm	ATL 2428

BSST330

Terrorist Motivations and Behaviors

Credits: 3 Grading Method: Regular

Restriction: Must be in the Global Terrorism minor; or special permission available for students in other Global Studies minors.

Explores theories explaining the formation of terrorist groups and the motivations behind terrorist behavior, building upon theories from social psychology, sociology, political science, criminology, and history.

0101	Bryan Arva	Seats (Total: 40)
	M 4:30pm - 7:15pm	SQH 1119
<i>Restricted to students in the Global Terrorism Minor(#BS07); or to obtain permission email education@start.umd.edu.</i>		
0201	Bryan Arva	Seats (Total: 5)
	M 4:30pm - 7:15pm	SQH 1119
<i>Restricted to students in one of the following minors: International Development & Conflict Mgmt minor (#BS02), Global Poverty minor (#AG06), or International Engineering minor (#EN01); or to obtain permission email education@start.umd.edu with your name and which Global Studies program in which you are enrolled.</i>		

BSST334

States of Emergency

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit SCIS

Students will explore the manner in which crises unfold from the perspective of a variety of emergency response disciplines, including: emergency management, law enforcement, intelligence analysis, cyber analysis, risk communication, health and human services, and emergency psychiatry/psychology. Students will participate in a semester-long simulation of an unfolding terrorist attack.

0101	Joseph Oudin	Seats (Total: 40)	
	Tu 12:30pm - 1:45pm	SHM 2102	
	Th 12:30pm - 1:45pm	ONLINE	Discussion
0102	Joseph Oudin	Seats (Total: 40)	
	Tu 12:30pm - 1:45pm	SHM 2102	
	Th 2:00pm - 3:15pm	ONLINE	Discussion
0103	Joseph Oudin	Seats (Total: 40)	
	Tu 12:30pm - 1:45pm	SHM 2102	
	Th 3:30pm - 4:45pm	ONLINE	Discussion

BSST335 Innovations in Countering Violent Extremism

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DVCC

Credit only granted for: BSST335 or BSST338V. Formerly: BSST338V.

Develop solutions to community-based radicalization through a blend of entrepreneurial, Design Thinking strategies and terrorist disengagement theories. Students will design original programs targeting real-world, at-risk communities and present their programs to a panel of experts.

Restricted to Global Terrorism Minor students (#BS07).

0101	Thomas Guarrieri	Seats (Total: 35)	
	W 1:30pm - 4:15pm	ESJ B0320	

BSST337 Ideology and Social Conditions in the Making of Terrorism

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: BSST338G or BSST337. Formerly: BSST338G.

This class focuses on the relations of ideology with social conditions in the historical context of the Middle East and North Africa in order to explain the process of the rise and domination of Islamist extremism and suicide terrorism as a dominant oppositional discourse in the region. Resting on a cognitive conception of ideology, this class focuses on the process in which ideological discourses shape the making of the terrorist mind.

Contact department for information to register for this course.

BSST338F Special Topics in Terrorism Studies; Media in War and Crisis

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

Contact department for information to register for this course.

BSST338I Special Topics in Terrorism Studies; Arab-Israeli Relations

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

Contact department for information to register for this course.

BSST338N Special Topics in Terrorism Studies; Arms Control in the Nuclear Realm

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

Contact department for information to register for this course.

BSST338R Special Topics in Terrorism Studies; Peace and Conflict Honors Seminar II: Regional Conflicts

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A special topics course for students in the Global Terrorism Minor program. Topics that may be offered are Psychology of Terrorism; Development of Counterterrorism Policies and Programs; Terrorism and Popular Culture; Terrorism and the Media; International Perspective on Terrorism and Counterterrorism (Education Abroad); The Evolution of Hezbollah; Terrorism and Small Wars; Political Islam in the West.

Contact department for information to register for this course.

BSST340 Oral Communication for National Security Careers

Credits: 3 Grading Method: Regular General Education: FSOC

Credit only granted for: BSST340 or BSST338E. Formerly: BSST338E.

Students will discuss perspectives on strategic communication and national security, while discussing and practicing public speaking skills and developing proficiency in three genres of security-related briefings. Students will work with the technical, scientific, and/or specialized data, vocabularies, processes, and products of the academic disciplines and/or fields of expertise relevant to national and international security careers.

FC01	Holly Roberts	Seats (Total: 25)
	MW 6:00pm - 7:15pm	KNI 1103
<i>Restricted to students in Freshmen Connection.</i>		

BSST386 Experiential Learning in Terrorism Studies

(Perm req)

Credits: 1-5 Grading Method: Regular,
Pass-Fail

This course will supplement student's experiential learning experience, or internship in the field of terrorism studies and homeland security with guided reflection on their experiences.

0101	Elizabeth Wasden	Seats (Total: 35)
	Class time/details on ELMs	ONLINE
<i>Registration by Departmental Permission Only</i>		

BSST399C Individual Study in Terrorism Studies; Community Resilience Engagement and Dialogue Fellowship Career Development Part 4

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

An independent study course for students in the Global Terrorism Minor program.

Restricted to students in the Community, Resilience, Engagement, and Dialogue Career Development Program.

Contact department for information to register for this course.

BSST399G Individual Study in Terrorism Studies; Independent Readings in Terrorism

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

An independent study course for students in the Global Terrorism Minor program.

0101	Elizabeth Wasden	Seats (Total: 1)
Contact instructor or department for details.		

BSST399T Individual Study in Terrorism Studies; Teaching Terrorism

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

An independent study course for students in the Global Terrorism Minor program.

0201	Elizabeth Wasden	Seats (Total: 3)
Contact instructor or department for details.		
0301	Elizabeth Wasden	Seats (Total: 3)
Contact instructor or department for details.		
0401	Elizabeth Wasden	Seats (Total: 6)
Contact instructor or department for details.		
0501	Elizabeth Wasden	Seats (Total: 2)
Contact instructor or department for details.		

BSST630

Motivations and Intents of Terrorists and Terrorist Groups

Credits: 3

Grading Method: Regular,
Audit

Restriction: Must be in the Terrorism Analysis Graduate Certificate Program. Credit only granted for: BSOS630 or BSST630. Formerly: BSOS630.

Examines motivations for terrorism from an interdisciplinary perspective, with emphasis on political and applied social psychological perspective. Topics may include: defining terrorism; preconditions; recruitment; domestic and international terrorism; and case studies and analysis of terrorist organizations.

ST01	Amy Pate	Seats (Total: 35)
Meets August 26, 2019 - December 9, 2019		
Tu 6:00pm - 8:30pm		ONLINE
Class time/details on ELMs		ONLINE

BSST634

Legal and Criminal Approaches to Counterterrorism

Credits: 3

Grading Method: Regular,
Audit

Restriction: Must be in the Graduate Certificate in Terrorism Analysis; or permission of instructor.

The United States and many of her allies have challenged long-standing legal boundaries in their effort to combat terrorism. This course examines these responses, including: increased criminalization of terrorism related activities; aggressive criminal prosecutions; detention of suspected terrorists indefinitely in far-off prisons; implementation of enhanced interrogation techniques; launch of drones to kill alleged terrorists, even U.S. citizens; and deployment of a vast system of mass surveillance.

ST01	Jeffrey Davis	Seats (Total: 30)
	M 7:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE

BSST635 Countering Violent Extremism: Policy and Practice

Credits: 3 Grading Method: Regular,
Audit

In recent years, the understanding of how and why individuals engage in violent extremism and terrorism has evolved and become more nuanced, as have the tools to mitigate these threats. A field of policy and practice called Countering Violent Extremism (CVE) has emerged that focuses on countering the pull of terrorist recruitment and influence by building resilience among populations vulnerable to radicalization.

ST01	Bryan Arva	Seats (Total: 30)
	W 6:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE

BUAC Accounting and Information Assurance

Fall 2019

All BUAC courses are for MS in Accounting students unless otherwise noted.

BUAC707 Financial Statement Analysis for Accountants and Auditors

(Perm req) Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC780 or BUAC707. Formerly: BUAC780.

Provides students with the tools to conduct a financial statement analysis, which is part of an overall business analysis. This involves understanding and using the information that financial statements are communicating to users.

0501	Nicholas Seybert	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	TuTh 2:00pm - 3:50pm	VMH 1520

BUAC710 Advanced Managerial Accounting and Control Systems**(Perm req)**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC782 or BUAC710. Formerly: BUAC782.

Focuses on topics that emphasize the role of managerial accounting in a firm's overall management planning and control structure. A key concern is to show how effective organizations ensure that the parts of the organization work together to create the whole, and how the sum of the parts, through synergy, can indeed be greater than the whole.

0501	Tharinda W Ranasinghe	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	TuTh 4:00pm - 5:50pm	VMH 1505

BUAC712 Business Communications for Accountants and Auditors**(Perm req)**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC784 or BUAC712. Formerly: BUAC784.

Focuses on the art of communication and its effects on people, organizations, and other stakeholders. The course will focus on two aspects of business communications: persuasion and effective presentations. The objective for the persuasion sessions is to have students improve upon their day-to-day oral business communications skills. This will be accomplished as participants learn to tailor each communication to the person or people with whom they are speaking.

0501	Samuel Handwerger	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	TuTh 12:00pm - 1:50pm	VMH 1505
0502	Samuel Handwerger	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 10:00am - 11:50am	VMH 1518

BUAC717 Enterprise Risk Management**(Perm req)**

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC758J or BUAC717. Formerly: BUAC758J.

Enterprise Risk Management, ERM, involves the study of the processes employed in identifying and assessing the risks and opportunities companies face, developing and implementing a plan to address those risks and opportunities, and monitoring progress implementing the plan. ERM is used to understand, control, and articulate the nature and level of risks taken in pursuit of business strategies coupled with accountability for risks taken and activities engaged in. One major benefit of ERM is that it provides an enhanced perspective and focus on risk management across the institution. The course will provide the opportunity to identify and discuss the issues and challenges in total risk management and will explore techniques for balancing enterprise risk and reward to optimize an organization's performance.

0501	Alan Siegfried, Elizabeth Folsom	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	TuTh 6:00pm - 7:50pm	VMH 1505

BUAC721 Business Law for Managers

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI764 or BUAC721.

Survey of United States legal institutions and processes as well as substantive areas of the law that affect business. Examination of tort and contract law, the legal forms of business organization and legal liability and major regulatory laws that affect business.

0501	Jon Crocker	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	TuTh 6:00pm - 7:50pm	VMH 1520

BUAC732 Intermediate Accounting II

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUAC731. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC758M or BUAC732. Formerly: BUAC758M.

Continuing the study of accounting information covering accounting principles found in US GAAP and IFRS as they apply to cash and receivables, inventory valuation, acquisition and disposition of plant, property and equipment, depreciation, impairments and depletion, intangible assets, current liabilities and contingencies, long-term liabilities, and stockholders equity.

0501	Stephen Brown	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 12:00pm - 1:50pm	VMH 1505

BUAC737 Financial Reporting for Executives

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC758R or BUAC737. Formerly: BUAC758R.

Financial Reporting involves the study of how financial executives can meet their reporting obligations in communicating the financial performance of their companies. The course reviews the financial reporting requirements including those imposed by the Sarbanes Oxley Act on public companies that will fulfill the informational needs of various stakeholders, including investors, stockholders and creditors, the primary financial statement users, along with customers, employees, and regulators. The course examines techniques to effectively meet these informational requirements, including accounting for and disclosing transactions and events that affect the primary financial statements income statement, balance sheet, statement of stockholders equity and cash flow statement.

0501	Michael Kimbrough	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 4:00pm - 5:50pm	VMH 1505

BUAC743 Financial Statement Analysis

Credits: 2 Grading Method: Regular

Prerequisite: BUSI610. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business.

Provides students with the tools to conduct a financial statement analysis, which is part of an overall business analysis. This involves understanding and using the information that financial statements are communicating to users.

DC06	Nicholas Seybert	Seats (Total: 50)
	Meets August 31, 2019 - October 19, 2019	
	Sa 8:30am - 1:00pm	DC C3
	<i>For PTMBA students only.</i>	

BUAC758C Special Topics in Accounting and Information Assurance; Data Driven Decision Making I

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in accounting and information assurance.

0502	Maria Bardossy	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 12:00pm - 1:50pm	VMH 1505

BUAC758D Special Topics in Accounting and Information Assurance; Tax VI: State and Local Taxation

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in accounting and information assurance.

0501	Jeffrey Milton	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	TuTh 6:00pm - 7:50pm	VMH 1528

BUAC758E Special Topics in Accounting and Information Assurance; Auditing with Automated Procedures/Accounting Analytics

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in accounting and information assurance.

0501	James McKinney	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	TuTh 4:00pm - 5:50pm	VMH 1528

BUAC758H Special Topics in Accounting and Information Assurance; Applied Research for Accounting & Auditing

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in accounting and information assurance.

0501	James McKinney	Seats (Total: 0)
Meets October 21, 2019 - December 10, 2019		
TuTh 4:00pm - 5:50pm		VMH 1528

BUAC758Q Special Topics in Accounting and Information Assurance; Research on Accounting and Economic Aspects of Cybersecurity

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in accounting and information assurance.

0501	Lawrence Gordon	Seats (Total: 20)
Meets October 21, 2019 - December 10, 2019		
TuTh 10:00am - 11:50am		VMH 1505

BUAC758S Special Topics in Accounting and Information Assurance; Systems for Data Analysis

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in accounting and information assurance.

0501	Woei-Jyh Lee	Seats (Total: 0)
Meets October 21, 2019 - December 10, 2019		
TuTh 2:00pm - 3:50pm		VMH 1505

BUAC758U Special Topics in Accounting and Information Assurance; Advanced Accounting

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in accounting and information assurance.

0501	Brent Solomon	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 6:00pm - 7:50pm	VMH 1505

BUAC759 Independent Study in Accounting and Information Assurance

(Perm req)

Credits: 1-6 Grading Method: Regular

Independent study for masters students in accounting and information assurance.

Contact department for information to register for this course.

BUAC762 Tax I: Taxation of Individuals

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC758T or BUAC762. Formerly: BUAC758T.

Federal taxation of individuals focusing on income, exclusions, deductions, depreciation, credits and capital transactions including home ownership. Property coverage includes the tax consequences of sales and dispositions of personal use assets, investment and business assets. Both tax planning and compliance issues are also covered. In addition the course covers waged based and equity-based compensation, taxable and nontaxable benefits as well as deferred compensation and various retirement plans.

0501	Brent Solomon	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 4:00pm - 5:50pm	VMH 1505

BUAC766 Taxation of Not-for-Profit Entities

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUAC758W or BUAC766. Formerly: BUAC758W.

An introduction to the theory and practice of taxation as applied in the nonprofit sector. The practice of taxation for nonprofits requires, inter alia, an understanding of the legal framework for these entities. Therefore, the course will devote significant time to understanding the legal environment and framework associated with nonprofits. The course goal is to enable students to become proficient in the major aspects of nonprofits that apply to the work of public accountants.

0501	Samuel Handwerger	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	TuTh 12:00pm - 1:50pm	VMH 1505

BUAC774 Tax VII: Estates, Trusts, & Personal Finance Planning

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H.

Covers the general tax considerations impacting estates and trusts. Includes an overview of the estate transfer tax and gift tax regime, in order to provide context to estate and trust income taxation. In addition, the course will cover how estates, trusts, and beneficiaries are taxed, and analyze some common estate planning techniques using trusts, including charitable trusts, grantor retained annuity trusts (GRATs), defective grantor trusts, valuation discounts, and other tax planning concepts.

0501	Jeffrey Milton	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 4:00pm - 5:50pm	VMH 1518

BUDT Decision and Information Technologies

Fall 2019

BUDT732 Decision Analytics

Credits: 2 Grading Method: Regular

Prerequisite: BUSI630. Credit only granted for: BMGT732 or BUDT732. Formerly: BMGT732.

Analytical modeling for managerial decisions using a spreadsheet environment. Includes linear and nonlinear optimization models, decision making under uncertainty and simulation models.

BA01	Robert Hoffman	Seats (Total: 50)
	Meets October 21, 2019 - December 10, 2019	
	Tu 6:25pm - 10:00pm	BA 103
	<i>For PTMBA students only.</i>	

DC01	Hua Ni	Seats (Total: 50)
	Meets October 21, 2019 - December 10, 2019	
	W 6:25pm - 10:00pm	DC C1
	Contact instructor or department for details.	
	<i>For PTMBA students only.</i>	

BUDT733

Data Mining and Predictive Analytics

Credits: 2 Grading Method: Regular

Prerequisite: BUSI630. Credit only granted for: BMGT733 or BUDT733. Formerly: BMGT733.

Data mining techniques and their use in business decision making. A hands-on course that provides an understanding of the key methods of data visualization, exploration, classification, prediction, time series forecasting, and clustering.

DC06	Jui Ramaprasad	Seats (Total: 50)
	Meets October 26, 2019 - December 14, 2019	
	Sa 8:30am - 1:00pm	DC C1
	<i>For PTMBA students only. Meets 10/26, 11/9, 11/23, 12/7, final 12/14.</i>	

BUDT758B

Special Topics in Decision, Operations and Information Technologies; Big Data and Artificial Intelligence for Business

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Guodong Gao	Seats (Total: 45)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 2:00pm - 3:15pm	VMH 1307
	<i>For MS in Information Systems students only. This course requires a relatively powerful laptop with at least 8 GB of memory and 30 GB of free space on hard drive.</i>	

0502	Guodong Gao	Seats (Total: 45)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 3:30pm - 4:45pm	VMH 1307
	<i>For MS in Information Systems students only. This course requires a relatively powerful laptop with at least 8 GB of memory and 30 GB of free space on hard drive.</i>	
0503	Guodong Gao	Seats (Total: 45)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 5:00pm - 6:15pm	VMH 1307
	<i>For MS in Information Systems students only. This course requires a relatively powerful laptop with at least 8 GB of memory and 30 GB of free space on hard drive.</i>	

BUDT758E

Special Topics in Decision, Operations and Information Technologies; Strategic and Transformational IT

(Perm req)

Credits: 2

Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Anand Gopal	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	TuTh 4:00pm - 5:50pm	VMH 1520
	<i>For MS in Information Systems students only.</i>	
0502	Anand Gopal	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	TuTh 2:00pm - 3:50pm	VMH 1520
	<i>For MS in Information Systems students only.</i>	

BUDT758F

Special Topics in Decision, Operations and Information Technologies; Google Online Analytics Challenge

(Perm req)

Credits: 3

Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	John Bono	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 11:00am - 12:15pm	VMH 1528
	<i>For MS in Business Analytics students only.</i>	
0502	John Bono	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 12:30pm - 1:45pm	VMH 1528
	<i>For MS in Business Analytics students only.</i>	

BUDT758G Special Topics in Decision, Operations and Information Technologies; Managing Digital Business Markets

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Sivakumar Viswanathan	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 2:00pm - 3:50pm	VMH 1330
	<i>For MS in Information Systems students only.</i>	
0502	Sivakumar Viswanathan	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 4:00pm - 5:50pm	VMH 1330
	<i>For MS in Information Systems students only.</i>	

BUDT758I Special Topics in Decision, Operations and Information Technologies; Applied Finance Information Systems

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

Masters in Information Systems only

0501	Leonard Mills	Seats (Total: 30)
	Meets August 26, 2019 - December 10, 2019	
	M 5:00pm - 7:40pm	VMH 1528
	<i>For MS in Information Systems students only.</i>	

BUDT758J
Special Topics in Decision, Operations and Information Technologies; Management of Information Systems

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

Masters in Information Systems only

0501	Paul Shapiro	Seats (Total: 30)
	Meets August 26, 2019 - December 10, 2019	
	MW 8:00am - 9:15am	VMH 1528
	<i>For MS in Information Systems students only.</i>	

BUDT758L
Special Topics in Decision, Operations and Information Technologies; Price Optimization & Revenue Management

(Perm req)

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Yi Xu	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	MW 11:00am - 12:15pm	VMH 1333
	<i>For MS in Business Analytics students only.</i>	
0502	Yi Xu	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	MW 12:30pm - 1:45pm	VMH 1333
	<i>For MS in Business Analytics students only.</i>	

BUDT758M Special Topics in Decision, Operations and Information Technologies; Healthcare Information Systems

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

Masters in Information Systems only.

0501	Neil Sehgal	Seats (Total: 30)
	Meets August 26, 2019 - December 10, 2019	
	W 5:00pm - 7:40pm	VMH 1528
	<i>For MS in Information Systems students only.</i>	

BUDT758O Special Topics in Decision, Operations and Information Technologies; Managing Supply Chains: Models & Analysis

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

GS01	Alan Briggs	Seats (Total: 50)
	Meets October 21, 2019 - December 10, 2019	
	W 6:25pm - 10:00pm	BLD2 2062
	Contact instructor or department for details.	
	<i>For PTMBA students only. This course is unavailable to students who have previously taken BUDT758R.</i>	

BUDT758P Special Topics in Decision, Operations and Information Technologies; Decision Analytics

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Ilya Ryzhov	Seats (Total: 30)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 9:30am - 10:45am	VMH 1528
	<i>For MS in Information Systems students only.</i>	

0503	Raghu Raghavan	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	MW 3:30pm - 4:45pm	VMH 1333
	<i>For MS in Business Analytics students only.</i>	
0504	Raghu Raghavan	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	MW 5:00pm - 6:15pm	VMH 1333
	<i>For MS in Business Analytics students only.</i>	

BUDT758Q

Special Topics in Decision, Operations and Information Technologies; Data Models and Decisions

Credits: 3

Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Sujin Kim	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	MW 11:00am - 12:15pm	VMH 1528
	<i>For MS in Information Systems students only.</i>	
0502	Sujin Kim	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	MW 12:30pm - 1:45pm	VMH 1528
	<i>For MS in Information Systems students only.</i>	
0503	Tunay Tunca	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	Tu 11:00am - 1:45pm	VMH 1333
	<i>For MS in Business Analytics students only.</i>	

0504	Tunay Tunca	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	Th 11:00am - 1:45pm	VMH 1333
	<i>For MS in Business Analytics students only.</i>	

BUDT758R
Special Topics in Decision, Operations and Information Technologies; Advanced Marketing Analytics

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

Contact department for information to register for this course.

BUDT758T
Special Topics in Decision, Operations and Information Technologies; Data Mining and Predictive Analytics

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

Contact department for information to register for this course.

BUDT758W
Special Topics in Decision, Operations and Information Technologies; Capstone Project in Business Analytics

(Perm req)

Credits: 3 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Suresh Acharya	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	M 7:00pm - 9:40pm	VMH 1333
	<i>For MS in Business Analytics students only.</i>	
0502	Arnold Greenland	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	W 7:00pm - 9:40pm	VMH 1333
	<i>For MS in Business Analytics students only.</i>	

BUDT758X**Special Topics in Decision, Operations and Information Technologies; Data Processing and Analysis in Python**

Credits: 3

Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Kunpeng Zhang	Seats (Total: 40)
	Meets August 26, 2019 - December 10, 2019	
	MW 9:30am - 10:45am	VMH 1528
	<i>For MS in Information Systems students only.</i>	
0502	Lauren Dahlin	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 5:00pm - 6:15pm	VMH 1333
	<i>For MS in Information Systems students only.</i>	
0503	Lauren Dahlin	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 6:30pm - 7:45pm	VMH 1333
	<i>For MS in Information Systems students only.</i>	

BUDT758Y**Special Topics in Decision, Operations and Information Technologies; Database Management Systems**

Credits: 3

Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Woei-Jyh Lee	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 9:30am - 10:45am	VMH 1333
	<i>For MS in Information Systems students only.</i>	

0502	Woei-Jyh Lee	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 8:00am - 9:15am	VMH 1333
	<i>For MS in Information Systems students only.</i>	
0503	Woei-Jyh Lee	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	MW 2:00pm - 3:15pm	VMH 1528
	<i>For MS in Business Analytics students only.</i>	
0504	Woei-Jyh Lee	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	MW 3:30pm - 4:45pm	VMH 1528
	<i>For MS in Business Analytics students only.</i>	

BUDT759 Independent Study in Decision and Information Technologies

(Perm req)

Credits: 1-6 Grading Method: Regular

Independent study for masters students in decision and information technologies.

Contact department for information to register for this course.

BUFN Finance

Fall 2019

Courses with the BUFN prefix are offered only for students in the Master of Finance and Master of Quantitative Finance programs.

BUFN610 Financial Management

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BUSI640, BUFN610, or BMGT610.

Focuses on the valuation of the real assets of firms as well as the valuation of stocks and bonds, the primary financial assets in an economy. While details vary, the conceptual foundations of valuation boil down to three themes: time value of money, no-arbitrage, and systematic risk.

0501	Liu Yang	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	TuTh 10:00am - 11:50am	VMH 1330
	<i>For Master of Finance students only.</i>	
0502	Liu Yang	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	TuTh 12:00pm - 1:50pm	VMH 1330
	<i>For Master of Quantitative Finance students only.</i>	

BUFN620

Capital Markets

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN740 or BUFN620. Formerly: BUFN740.

Designed to deepen the foundations necessary to finance focused students, especially those intending to specialize in the quantitative areas of finance including investments, fixed income, and financial engineering.

0501	Sarah Kroncke	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 2:00pm - 3:50pm	VMH 1511
	<i>For Master of Finance students only.</i>	

BUFN640

Financial Econometrics I

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN758N or BUFN640. Formerly: BUFN758N.

In this course we study standard techniques used in the econometric analysis of financial data and discuss the underlying techniques and focus on the understanding and interpretation.

0501	Serhiy Kozak	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 10:00am - 11:50am	VMH 1330
	<i>For Master of Quantitative Finance students only.</i>	
0502	Serhiy Kozak	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 12:00pm - 1:50pm	VMH 1330
	<i>For Master of Finance students only.</i>	

BUFN650

Financial Econometrics II

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN640. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN758O or BUFN650. Formerly: BUFN758O.

A hands-on and application-oriented short course on data management and financial modeling. It introduces students to basic data management techniques and a variety of analytical models used in finance.

0501	Serhiy Kozak	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 10:00am - 11:50am	VMH 1330
	<i>For Master of Finance students only.</i>	
0502	Serhiy Kozak	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 12:00pm - 1:50pm	VMH 1330
	<i>For Master of Quantitative Finance students only.</i>	

BUFN712

Financial Restructuring

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BUFN712 or BUFN752. Formerly: BUFN752.

Focuses on identifying ways to increase firm value through corporate restructuring. Specific topics include: mergers and tender offers, spin-offs, carve-outs, divestitures, takeover defense strategies, leveraged buy-outs, and international acquisitions. Additionally, the theory, practice and empirical evidence related to each of these topics will be covered. Emphasis will be placed on valuation analysis and strategic considerations.

0501	James Seward	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 6:00pm - 7:50pm	VMH 1505

BUFN716 Corporate Risk Management

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BUFN716 or BUFN754. Formerly: BUFN754.

Surveys the theory and practice of financial risk identification, measurement, and mitigation at financial and non-financial firms. Topics will include hedging with options and futures, interest rate risk management, Value-at-Risk (VaR), Cashflow-at-Risk (CaR), Earnings-at-Risk (EaR), credit risk, equity risk, commodities risk, exchange rate risk, and lessons from risk management disasters.

0501	Clifford Rossi	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	TuTh 10:00am - 11:50am	VMH 1330

BUFN721 International Investment

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN721 or BUFN770. Formerly: BUFN770.

Addresses international stock markets, portfolio theory, international interest rates, exchange rates and exchange rate derivatives (options, forwards, and futures), exchange rate swaps and exchange rate exposure (operating, translation, and transaction), foreign investment strategy.

0501	Steven Heston	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	TuTh 2:00pm - 3:50pm	VMH 1505
0502	Steven Heston	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	TuTh 4:00pm - 5:50pm	VMH 1505

BUFN723 International Corporate and Project Finance

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610 and BUFN721. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN723 or BUFN771. Formerly: BUFN771.

Continuation of BUFN721. Issues addressed will include capital budgeting, project financing, exchange rate exposure (operating, translation, and transaction), foreign investment strategy, and risk management.

0501	Steven Heston	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 12:00pm - 1:50pm	VMH 3330H

BUFN726 Institutional Asset Management

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN660, BUFN726, BUFN761 or BUFN773. Formerly: BUFN773.

Examines how money is managed by organizations such as university endowments, pension funds, mutual funds, hedge funds, and private equity funds. Involves a mixture of finance and economics and emphasizes the incentives professional money managers face within the context of the organizational structure in which they operate. Particular attention is paid to compensation structures and monitoring mechanisms.

0501	Albert Kyle	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	M 6:25pm - 10:00pm	VMH 1330
0502	Albert Kyle	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	Th 6:25pm - 10:00pm	VMH 1330
	Contact instructor or department for details.	

BUFN730

Applied Equity Analysis

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BUFN760 or BUFN730. Formerly: BUFN760.

Students will learn to analyze equity securities using the basic EIC (Economy/Industry/Company) framework used in the financial industry, paying special attention to financial statement analysis. Students also will learn the primary valuation techniques used to estimate market values for equity securities.

0501	Sarah Kroncke	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 12:00pm - 1:50pm	VMH 1518

BUFN734

Portfolio Management

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BUFN734 or BUFN763. Formerly: BUFN763.

Provides training that is important in understanding the investment process - the buy side of the financial world. Specifically, the objective is to provide graduate-level instruction in the following topics, both in theory and in using financial markets data to test the basic theory and practice of portfolio choice and equilibrium pricing models and their implications for efficient portfolios.

0501	Mark Loewenstein Meets August 26, 2019 - October 14, 2019 TuTh 2:00pm - 3:50pm	Seats (Total: 0) VMH 1330
0502	Mark Loewenstein Meets August 26, 2019 - October 14, 2019 TuTh 4:00pm - 5:50pm	Seats (Total: 0) VMH 1330

BUFN738 Investment Fund Management; Investment Fund Management

(Perm req)

Credits: 3 Grading Method: Regular

Provides second-year Master in Business Administration students with the opportunity to apply the skills learned in finance classes to actual investment decisions through management of an investment fund.

Restriction: Permission of Department.

DC01	Kenneth Fuller Meets August 26, 2019 - December 10, 2019 Tu 6:25pm - 10:00pm	Seats (Total: 20) Location: TBA
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BUFN740 Capital Markets

Credits: 2 Grading Method: Regular

Prerequisite: BUSI640. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUFN740 or BUFN620.

Designed to deepen the foundations necessary to finance focused students, especially those intending to specialize in the quantitative areas of finance including investments, fixed income, and financial engineering.

DC06	Ceyed Baiju Meets October 26, 2019 - December 14, 2019 Sa 2:00pm - 6:30pm <i>For Part-time MBA students only. Meets on 10/26, 11/9, 11/23, 12/7, and 12/14.</i>	Seats (Total: 50) DC C2
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BUFN741 Advanced Capital Markets

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN620; or permission of BMGT-Robert H. Smith School of Business. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN758P or BUFN741. Formerly: BUFN758P.

This course covers modern theories and techniques for investments and asset pricing. The main topics covered are: portfolio theory, pricing models, market efficiency, fixed income investment, forwards and futures, and options.

0501	Kenneth Fuller	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	TuTh 4:00pm - 5:50pm	VMH 1330
	<i>For Master of Quantitative Finance students only.</i>	

BUFN742 Financial Engineering

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610. Restriction: Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BUFN742 or BUFN766. Formerly: BUFN766.

Develop Excel and Visual Basic (VBA) models to solve problems related to portfolio management, options valuation, fixed income securities, interest rate processes, and risk management. This course thus bridges theory with the design of algorithms and models that can be directly applied in practice.

0501	Mark Loewenstein	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 12:00pm - 1:50pm	VMH 1511
0502	Mark Loewenstein	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 4:00pm - 5:50pm	VMH 1511

BUFN744 Fixed Income Derivatives

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUFN610; and BUFN732. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN765 or BUFN744. Formerly: BUFN765.

Surveys fixed income assets and related securities such as Exchange-traded bond options; bonds with embedded options; floating rate notes; caps, collars, and floors; floating rate notes with embedded options. Also surveys advanced tools for interest-rate and fixed-income portfolio management, including the use of derivative securities, and the application of binomial trees for analysis of options, and a sound understanding of stochastic yield curves.

0501	Haluk Unal	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	M 6:25pm - 10:00pm	VMH 1335

BUFN751 Financial Strategy For Corporations

Credits: 2 Grading Method: Regular

Prerequisite: BUSI640. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUFN751 or BUFN710.

An advanced course in corporate finance, focusing on the issues that firms face when they plan to raise external capital from financial markets. The focus is on the financing problems faced by mid-market to large firms and on capital raised from public markets. The forms of external finance vary from simple debt or equity to more complex securities that bundle with an element of risk management.

BA01	James Seward	Seats (Total: 50)
	Meets October 21, 2019 - December 10, 2019	
	W 6:25pm - 10:00pm	BA 103
	Contact instructor or department for details.	
GS01	James Seward	Seats (Total: 50)
	Meets October 21, 2019 - December 10, 2019	
	M 6:25pm - 10:00pm	BLD2 3032

BUFN755 Entrepreneurial Finance and Private Equity

Credits: 2 Grading Method: Regular

Prerequisite: BUSI640. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUFN755 or BUFN717.

An advanced topics course in Corporate Finance. The major emphasis is how financiers help growing firms - and in particular young start-ups - using different types of securities at different points in the industry's and firm's life. Financing arrangements and securities studied will include private equity funds and private financings placements, Venture Capital (VC) and preferred equity, Investment Banks through Initial Public Offerings (IPOs), Private equity finds, debt and leveraged buyouts. Students will learn additional techniques that will help them understand how financiers value firms and how to understand, plan and value different financing strategies.

BA01	Thaddeus Davis	Seats (Total: 50)
	Meets October 21, 2019 - December 10, 2019	
	M 6:25pm - 10:00pm	BA 102

BUFN758A Special Topics in Finance; Text Mining for Economics and Finance

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in finance.

0501	Paul Soto	Seats (Total: 45)
	Meets August 26, 2019 - October 14, 2019	
	Tu 6:25pm - 10:00pm	VMH 1202
	<i>Students will need to complete the "Python Statistics Essential Training" through Lynda.com if you do not have experience with Python.</i>	

BUFN758Z Special Topics in Finance; Global Equity Fund

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN759 Independent Study in Finance

(Perm req)

Credits: 1-6 Grading Method: Regular

Independent study for Masters students in finance.

Contact department for information to register for this course.

BUFN761**Derivative Securities**

Credits: 2 Grading Method: Regular

Prerequisite: BUFN740. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUFN660, BUFN726, BUFN761 or BUFN773. Formerly: BUFN726.

Standard types of derivatives contracts are presented, and illustrated as to how they are used in practice. The theory of pricing these contracts is then presented in detail. The use of static and dynamic replication strategies, and the concept of no-arbitrage strategies is illustrated in numerous ways. Standard valuation techniques are covered, and standard formulas are presented. The theory is then applied to develop specific pricing and hedging strategies for various types of derivatives on different underlying assets. The management of the exposure of various risks is covered in detail as well.

DC01	Tanakorn Makaew	Seats (Total: 50)
	Meets August 26, 2019 - October 14, 2019	
	W 6:25pm - 10:00pm	DC C1

BUFN762**Fixed Income Analysis**

Credits: 2 Grading Method: Regular

Prerequisite: BUFN740. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUFN732 or BUFN762.

Describes important financial instruments which have market values that are sensitive to interest rate movements. Develops tools to analyze interest rate sensitivity and value fixed income securities. Defines and explains the vocabulary of the bond management business.

DC01	John Roberts	Seats (Total: 50)
	Meets October 21, 2019 - December 10, 2019	
	M 6:25pm - 10:00pm	DC C1
	<i>For Part-time MBA students only.</i>	

BUFN763**Portfolio Management**

Credits: 2 Grading Method: Regular

Prerequisite: BUFN740. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUFN734 or BUFN763.

Provides training that is important in understanding the investment process - the buy side of the financial world. Specifically, the objective is to provide graduate-level instruction in the following topics, both in theory and in using financial markets data to test the basic theory and practice of portfolio choice and equilibrium pricing models and their implications for efficient portfolios.

BA01	Kenneth Fuller	Seats (Total: 50)
	Meets August 26, 2019 - October 14, 2019	
	Th 6:25pm - 10:00pm	BA 102

BUFN768A Special Topics in Finance; Experiential Learning Project

(Perm req)

Credits: 1-4 Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN768B Special Topics in Finance; Experiential Learning Project

(Perm req)

Credits: 1-4 Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN768O Special Topics in Finance; Experiential Learning Project

(Perm req)

Credits: 1-4 Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN768P Special Topics in Finance; Experiential Learning Project

(Perm req)

Credits: 1-4 Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN768X Special Topics in Finance; Experiential Learning Project

(Perm req)

Credits: 1-4

Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN768Y

Special Topics in Finance; Experiential Learning Project

(Perm req)

Credits: 1-4

Grading Method: Regular

Selected experiential learning opportunities in advanced topics in the various fields of graduate study in finance.

Contact department for information to register for this course.

BUFN772

Bank Management

Credits: 2

Grading Method: Regular

Prerequisite: BUSI640. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUFN722, BUFN724, or BUFN772. Formerly: BUFN722.

Analyze and discuss readings in bank management, with primary focus on the measurement and management of risk, including credit, market, and interest rate risk. Look at the management of liquid reserves. Examine the special nature of financial institutions, incorporating their functions, policies, services, and regulation. Study the evolving nature of the financial services industry, by reading the financial press and by having outside practitioner speakers. Focus is on U.S. banks.

GS01

Albert Ciafre

Seats (Total: 50)

Meets August 26, 2019 - October 14, 2019

M 6:25pm - 10:00pm

BLD2 2062

BULM

Logistics, Business, and Public Policy

Fall 2019

Courses with the BULM prefix are offered only for students in the MS in Supply Chain Management program.

BULM700

Business Fundamentals for Supply Chain Managers I

(Perm req)

Credits: 2

Grading Method: Regular

Restriction: Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BULM758K or BULM700. Formerly: BULM758K.

This course is part of a series of two courses Business Fundamentals for SCM part I and, part II. The series is intended to provide you with the knowledge and skills necessary to quantify the impact of supply chain management decisions on the bottom line. Students will gain a solid understanding of accounting, finance and the link between supply chain and overall financial performance. Students will analyze financial statements and explain the implications of supply chain management decisions on standard financial ratios and all components of the balance sheet and income statement. Through interactive supply chain finance models, students will demonstrate the sensitivity of outcome to multiple independent variables. Last but not least, students will also learn how to apply the net present value technique to evaluate the feasibility of investment projects in supply chain.

0501	Humberto Coronado	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 10:00am - 11:50am	VMH 1511

BULM701

(Perm req)

Business Fundamentals for Supply Chain Managers II

Credits: 2 Grading Method: Regular

Prerequisite: BULM700; or permission of BMGT-Robert H. Smith School of Business. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BULM758Q or BULM701. Formerly: BULM758Q.

This is the second course of the series Business fundamentals for Supply Chain Managers. This course is intended to provide you with the knowledge and skills necessary to quantify the impact of supply chain management decisions on the bottom line. Students will gain a solid understanding of accounting, finance and the link between supply chain and overall financial performance. Students will analyze financial statements and explain the implications of supply chain management decisions on standard financial ratios and all components of the balance sheet and income statement. Through interactive supply chain finance models, students will demonstrate the sensitivity of outcome to multiple independent variables. Last but not least, students will also learn how to apply the net present value technique to evaluate the feasibility of investment projects in supply chain.

0501	Humberto Coronado	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 10:00am - 11:50am	VMH 1511

BULM710

(Perm req)

Data Driven Decision Making I

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI630, BULM758X or BULM710. Formerly: BULM758X.

Analytical modeling of business decisions; uncertainty, risk and expected utility; regression modeling to infer relationships among variables.

0501	Maria Bardossy	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	TuTh 2:00pm - 3:50pm	VMH 1528

BULM711 Data Driven Decision Making II

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI630, BULM758Y or BULM711. Formerly: BULM758Y.

Analytical modeling of business decisions; uncertainty, risk and expected utility; regression modeling to infer relationships among variables.

0501	Maria Bardossy	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 2:00pm - 3:50pm	VMH 1505

BULM721 Global Supply Chain Management

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI672 or BULM721.

Offers a practical blueprint for understanding, building, implementing, and sustaining supply chains in today's rapidly changing global supply chain environment. It will provide the student with a survey of the fast-moving Supply Chain Management discipline and practice, including the evolution of supply chain strategies, business models and technologies; current best practices in demand and supply management; and methodologies for conducting supply chain-wide diagnostic assessments and formulating process improvement plans.

0501	Adams Steven	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	TuTh 12:00pm - 1:50pm	VMH 1511

BULM732 Networks and Influence

(Perm req)

Credits: 2

Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMO725 or BULM732.

Focuses on networks, social capital, and influence as they relate to operating effectively in organizations. It draws heavily on emerging literature related to social capital and networks, but also integrates concepts from persuasion, communication, and motivation literatures to aid your efforts to build a successful track record for yourself and your organization.

0501	Gosia Langa Basit	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 2:00pm - 3:50pm	VMH 1314

BULM742

Global Supply Chain Resources Planning

(Perm req)

Credits: 2

Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business.

Provides students with an overall understanding of how firms use an advanced supply chain planning (ASCP) application as an integral part of their materials management process which includes such activities as production planning, materials requirements planning, and distribution requirements planning.

0501	Philip Evers	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 8:00am - 9:50am	VMH 1511

BULM750

Lean Sigma for Supply Chain I

(Perm req)

Credits: 2

Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BULM758L or BULM750. Formerly: BULM758L.

This course is part of a series of courses. This the second part of the Lean Six Sigma for SC Managers course series. We will be focusing on the Analyze, Improve and Control phases of the Lean Six Sigma methodology. Lean Six Sigma is a robust methodology for problem solving aiming to improve quality and reduce speed within a process. This course covers up to the Lean and Six Sigma Green Belt level body of knowledge. You will be expected to conduct a project on a case study of a business looking to improve their processes to meet customer requirements.

0501	Jewelyn Harrington	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	M 6:25pm - 10:00pm	VMH 1518

BULM751 Lean Sigma for the Supply Chain II

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BULM750. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BULM758V or BULM751. Formerly: BULM758V.

This course is part of a series of courses. The first part will cover the Introduction, Define and Measure Phases of the Lean Six Sigma Methodology. Lean Six Sigma is a robust methodology for problem solving aiming to improve quality and reduce speed within a process. This course covers up to the Lean and Six Sigma Green Belt level body of knowledge. You will be expected to conduct a project on a case study of a business looking to improve their processes to meet customer requirements.

0501	Jewelyn Harrington	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	M 6:25pm - 10:00pm	VMH 1518

BULM756 Supply Chain Strategy

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BULM758B or BULM756. Formerly: BULM758B.

Examines supply chain management at the strategic level. Through class lectures, case discussions, and assignments, students first learn about the determinants of corporate strategy. Supply chain strategies are then discussed, along with the need to properly align supply chain strategy with corporate strategy. Finally, there is a discussion of how to implement supply chain strategy, given various environmental and market considerations.

0501	Martin Dresner	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 10:00am - 11:50am	VMH 1518

BULM759 Independent Study in Logistics Management

(Perm req)

Credits: 1-6

Grading Method: Regular

Independent study for Masters students in Logistics Management.

Contact department for information to register for this course.

BUMK Marketing

Fall 2019

BUMK716

Brand Management

Credits: 2

Grading Method: Regular

Prerequisite: BUSI650. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business.

Brand names are valuable assets for firms. Effective brand management is critical to maintaining the long-term profitability of products and services. Topics include understanding brands from the customer's perspective, building brand equity, measuring brand equity, leveraging brand equity, managing brand portfolios and managing brands over time.

GS01	Rosellina Ferraro	Seats (Total: 50)
	Meets August 26, 2019 - October 14, 2019	
	W 6:25pm - 10:00pm	BLD2 2062
	<i>For PTMBA students only.</i>	

BUMK720

Marketing Strategy

(Perm req)

Credits: 3

Grading Method: Regular

Restriction: Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program. Credit only granted for: BUMK758B or BUMK720. Formerly: BUMK758B.

Introduces students to the fundamentals of marketing. This course combines lectures, readings, case analyses and a competitive simulation. A significant part of the course involves a competitive computer-based simulation in which student teams leverage marketing data and metrics to make marketing decisions for an organization that is competing in a market against other student teams in the class.

0501	Judy Frels	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 3:30pm - 4:45pm	VMH 1333
	<i>For MS in Marketing Analytics students only.</i>	

0502	Judy Frels	Seats (Total: 35)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 5:00pm - 6:15pm	VMH 1314
	<i>For MS in Marketing Analytics students only.</i>	

BUMK724

Customer Analysis

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758D or BUMK724. Formerly: BUMK758D.

Focuses on the analysis of customer decision-making and how marketing strategy can be used to influence those decisions. The framework used is the buyer behavior model, in which concepts from psychology, sociology, and economics are applied to individual and organizational purchase decisions. Marketing strategies of leading firms in consumer products, technology, and services (including internet services) are analyzed using a variety of case study formats.

0501	Rosellina Ferraro	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	MW 2:00pm - 3:15pm	VMH 1333
	<i>For MS in Marketing Analytics students only.</i>	

BUMK726

Statistical Programming for Customer Analytics

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758E or BUMK726. Formerly: BUMK758E.

Provides students with a foundation in probability and statistics with a focus on business applications. It also gives students a foundation for thinking in both likelihood and Bayesian frameworks. The course teaches students the basics of SAS, as well as its use in statistical analysis and statistical programming. Also addressed are basic SAS language structure, data management, OLAP, enterprise miner, statistical analysis, writing procedures.

0501	Lingling Zhang	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 2:00pm - 3:15pm	VMH 1333
	<i>For MS in Marketing Analytics students only.</i>	
0502	Lingling Zhang	Seats (Total: 45)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 3:30pm - 4:45pm	VMH 1336
	<i>For MS in Marketing Analytics students only.</i>	

BUMK742

Advanced Marketing Analytics

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758K or BUMK742. Formerly: BUMK758K.

The analysis of marketing data needed for profitable marketing decisions. Advanced methods of marketing analysis for marketing decisions, including choice and count data models, joint analysis of consumers choice, quantity and timing decisions, mixture and mixture regression models, and conjoint analysis, all using data-based cases and SAS software. Applications are in the areas of strategic marketing, marketing segmentation, eye tracking for advertising effectiveness, new product development, sales promotion analysis, pricing, design of marketing mix, and direct marketing.

0501	Michel Wedel	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	W 7:00pm - 9:40pm	VMH 1330
	<i>For MS in Marketing Analytics students only.</i>	
0502	Michel Wedel	Seats (Total: 45)
	Meets August 26, 2019 - December 10, 2019	
	Tu 7:00pm - 9:40pm	VMH 1412
	<i>For MS in Marketing Analytics students only.</i>	

BUMK758J

Special Topics in Marketing; Pricing Strategies for Competitive Advantage

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in marketing.

DC01	Bo Zhou	Seats (Total: 50)
	Meets October 21, 2019 - December 10, 2019	
	Th 6:25pm - 10:00pm	DC C1
	Contact instructor or department for details.	
	<i>For PTMBA students only.</i>	
GS01	Bo Zhou	Seats (Total: 50)
	Meets October 21, 2019 - December 10, 2019	
	Tu 6:25pm - 10:00pm	BLD2 2062
	<i>For PTMBA students only.</i>	

BUMK758K Special Topics in Marketing; Advanced Marketing Analytics

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in marketing.

BA01	Michel Wedel	Seats (Total: 50)
	Meets August 26, 2019 - October 14, 2019	
	Th 6:25pm - 10:00pm	BA 103
	<i>For PTMBA students only.</i>	
DC01	Jie Zhang	Seats (Total: 50)
	Meets August 26, 2019 - October 14, 2019	
	Tu 6:25pm - 10:00pm	DC C1
	<i>For PTMBA students only.</i>	

BUMK758O Special Topics in Marketing; Digital Marketing

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in marketing.

DC01	Pallassana Kannan	Seats (Total: 50)
	Meets August 26, 2019 - October 14, 2019	
	M 6:25pm - 10:00pm	DC C1
	<i>For PTMBA students only.</i>	

BUMK758P Special Topics in Marketing; Innovation and Product Development

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in marketing.

DC01	Mary Beth Furst	Seats (Total: 50)
	Meets October 21, 2019 - December 10, 2019	
	M 6:25pm - 10:00pm	DC C2
	<i>For PTMBA students only.</i>	

BUMK759 Independent Study in Marketing

(Perm req)

Credits: 1-6 Grading Method: Regular

Independent study for Masters students in Marketing.

Contact department for information to register for this course.

BUMK760 Business Policies and Ethics

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758F or BUMK760. Formerly: BUMK758F.

The standards of business conduct, morals and values as well as the role of business in society. Students will consider the sometimes conflicting interests of and claims on the firm and its objectives.

0501	Amna Khawaja	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	Tu 6:00pm - 7:50pm	VMH 1330
	<i>For MS in Marketing Analytics students only.</i>	

BUMK762 Business Communication I

(Perm req)

Credits: 1

Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758H or BUMK762. Formerly: BUMK758H.

A study of the standards of business conduct, morals and values as well as the role of business in society. Students will consider the sometimes conflicting interests of and claims on the firm and its objectives.

0501	Christine Schaaf	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	F 10:00am - 11:50am	VMH 1202
	<i>For MS in Marketing Analytics students only.</i>	
0502	Christine Schaaf	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	F 12:00pm - 1:50pm	VMH 1202
	<i>For MS in Marketing Analytics students only.</i>	

BUMK766

Digital Analytics

(Perm req)

Credits: 2

Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758N or BUMK766. Formerly: BUMK758N.

Examines the process of developing, implementing and analyzing strategies for successfully marketing a variety of existing and potential products and services on the Internet. Special attention is devoted to the tools and techniques unique to the electronic media.

0501	Michael Trusov	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	W 6:25pm - 10:00pm	VMH 1335
	<i>For MS in Marketing Analytics students only.</i>	

BUMK773

Pricing Analytics and Strategies

(Perm req)

Credits: 2

Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758J or BUMK773. Formerly: BUMK758J.

The economic and behavioral aspects of pricing and the evaluation of innovative pricing practices such as price matching, customized pricing, bundle pricing and product line pricing. The course will cover both B2B, B2C, online and offline markets. Instruction will be through a mix of case studies, pricing simulation games, hands-on exercises, practitioner guest lectures and discussions.

0501	Bo Zhou	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 4:00pm - 5:50pm	VMH 1511
	<i>For MS in Marketing Analytics students only.</i>	

BUMO Management and Organization Fall 2019

Courses with the BUMO prefix are offered only for students in the part- time MBA program.

BUMO714 Competitive and Collaborative Negotiation

Credits: 2 Grading Method: Regular

Corequisite: BUMO715. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUMO714 or BMGT700.

Increase negotiating self-confidence and improve capacity to achieve win-win solutions to organizational problems. Improve effectiveness at finding creative solutions to conflict.

DC06	Gosia Langa Basit	Seats (Total: 50)
	Meets October 26, 2019 - December 14, 2019	
	Sa 8:30am - 1:00pm	DC C3

BUMO725 Networks and Influence

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program. Credit only granted for: BUMO725 or BULM732.

Focuses on networks, social capital, and influence as they relate to operating effectively in organizations. It draws heavily on emerging literature related to social capital and networks, but also integrates concepts from persuasion, communication, and motivation literatures to aid your efforts to build a successful track record for yourself and your organization.

DC01	Gosia Langa Basit	Seats (Total: 50)
	Meets August 26, 2019 - October 14, 2019	
	Th 6:25pm - 10:00pm	DC C2

BUMO732 Entrepreneurship and New Ventures

Credits: 2 Grading Method: Regular

Credit only granted for: BUMO732 or BUSI660. Formerly: BMGT780.

Provides an introduction to important tools and skills necessary to create and grow a successful new venture. Integrates research findings from a range of different practical and intellectual perspectives, including psychology, sociology, economics, strategic management, and history into practical, hands on lessons for an entrepreneur. Class projects provide the foundations for new, real businesses.

DC01	Oliver Schlake	Seats (Total: 50)
	Meets October 21, 2019 - December 10, 2019	
	Tu 6:25pm - 10:00pm	DC C2
DC06	Oliver Schlake	Seats (Total: 50)
	Meets August 31, 2019 - October 19, 2019	
	Sa 2:00pm - 6:30pm	DC C3

BUMO756 Industry Analysis

Credits: 2 Grading Method: Regular

Recommended: BUSI690. Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BMGT792 or BUMO756. Formerly: BMGT792.

Conceptual framework and analytical tools for understanding the dynamics of industry structure. Impacts of past and future attractiveness of the industry on profitability. Developing and applying frameworks to devise competitive strategies in uncertain industries.

BA01	Serguey Braguinsky	Seats (Total: 50)
	Meets August 26, 2019 - October 14, 2019	
	Tu 6:25pm - 10:00pm	BA 103

BUMO758A Special Topics in Management and Organization; Strategic Growth for Emerging Companies

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in management and organization.

DC06	Limor Eisenman	Seats (Total: 50)
Meets October 26, 2019 - December 14, 2019		
Sa 2:00pm - 6:30pm		DC C3

BUMO758K Special Topics in Management and Organization; Business Consulting

Credits: 4 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in management and organization.

BA01	Nicole Coomber	Seats (Total: 50)
Meets August 26, 2019 - December 10, 2019		
M 6:25pm - 10:00pm		BA 103

BUMO759 Independent Study in Management and Organization

(Perm req)

Credits: 1-6 Grading Method: Regular

*Independent study for Masters students in management and organization.***Contact department for information to register for this course.**

BUSI Part-Time MBA Program

Fall 2019*All BUSI courses are for part-time MBA students unless otherwise noted.***BUSI610 Introduction to Financial Accounting**

(Perm req)

Credits: 2 Grading Method: Regular

*Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUSI610, BUAC602, BUFN602, or BMGT602.**Overview of financial accounting, periodic financial statements and the financial reporting process. Importance of financial statements as information source for creditors and investors and as a means by which managers can communicate information about their firms.*

Non majors should review their registration eligibility in the statement preceding the BUSI courses.

BA01	Musa Subasi Meets October 21, 2019 - December 10, 2019 Tu 6:25pm - 10:00pm	Seats (Total: 0) BA 104
DC01	Michael Kimbrough Meets October 21, 2019 - December 10, 2019 W 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) DC C3
DC02	Michael Kimbrough Meets October 21, 2019 - December 10, 2019 Th 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) DC C3
GS01	Rebecca Hann Meets October 21, 2019 - December 10, 2019 M 6:25pm - 10:00pm	Seats (Total: 0) BLD2 2032

BUSI622
Managing Digital Business Markets

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business.

The objective is to understand the strategic and tactical issues involved in managing digital businesses and markets. Also, some of the characteristics of digital businesses and markets that make them unique and understand how companies can best manage them will be examined.

DC06	Il-Horn Hann Meets August 31, 2019 - October 19, 2019 Sa 8:30am - 1:00pm Class time/details on ELMs <i>Meets 8/31, 9/14, 9/28, 10/12, Final 10/19.</i>	Seats (Total: 50) DC C2 ONLINE
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BUSI630
Data Driven Decision Making

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)).

Analytical modeling of business decisions; uncertainty, risk and expected utility; regression modeling to infer relationships among variables.

BA01	Ashish Kabra Meets August 26, 2019 - October 14, 2019 Tu 6:25pm - 10:00pm	Seats (Total: 0) BA 104
DC01	Ashish Kabra Meets August 26, 2019 - October 14, 2019 W 6:25pm - 10:00pm	Seats (Total: 0) DC C3
DC02	Ashish Kabra Meets August 26, 2019 - October 14, 2019 Th 6:25pm - 10:00pm	Seats (Total: 0) DC C3
GS01	Ashish Kabra Meets August 26, 2019 - October 14, 2019 M 6:25pm - 10:00pm	Seats (Total: 0) BLD2 2032

BUSI634

(Perm req)

Operations Management

Credits: 2 Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI634 or BMGT624.

Operations management is concerned with efficient and effective design and operation of business processes for delivering products and/or services. Emphasis is given to process analysis and design, capacity management and bottlenecks, waiting lines and the impact of uncertainty in process performance, quality management, lean, six-sigma, and revenue management.

BA01	Yi Xu Meets August 26, 2019 - October 14, 2019 W 6:25pm - 10:00pm	Seats (Total: 0) BA 104
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DC01	Zhi-Long Chen Meets August 26, 2019 - October 14, 2019 M 6:25pm - 10:00pm	Seats (Total: 0) DC C2
DC02	Zhi-Long Chen Meets August 26, 2019 - October 14, 2019 Tu 6:25pm - 10:00pm	Seats (Total: 0) DC C2
GS01	Zhi-Long Chen Meets August 26, 2019 - October 14, 2019 Th 6:25pm - 10:00pm	Seats (Total: 0) BLD2 2032

BUSI662

(Perm req)

Leadership and Teamwork

Credits: 2

Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BMGT600, BUSI662, or BUSM600.

Course examines concepts of team-building and leadership which are critical to managerial success. Topics include leadership, decision making, communication and conflict, work motivation, building effective teams, and organizational change and culture.

BA01	Neta Moye Meets August 26, 2019 - October 14, 2019 Th 6:25pm - 10:00pm	Seats (Total: 0) BA 104
DC01	Subrahmaniam Tangirala Meets August 26, 2019 - October 14, 2019 M 6:25pm - 10:00pm	Seats (Total: 0) DC C3
DC02	Subrahmaniam Tangirala Meets August 26, 2019 - October 14, 2019 Tu 6:25pm - 10:00pm	Seats (Total: 0) DC C3

GS01	Gosia Langa Basit	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	W 6:25pm - 10:00pm	BLD2 2032

BUSI683

The Global Economic Environment

(Perm req)

Credits: 2

Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)).

Relationship between national and international economic environments. Determinants of output, interest rates, prices and exchange rates. Analysis of effect of economic policies (fiscal, monetary, trade, tax) on the firm and the economy.

BA01	Cristian Dezso	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	M 6:25pm - 10:00pm	BA 104
DC01	Cristian Dezso	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	W 6:25pm - 10:00pm	DC C2
	Contact instructor or department for details.	
DC02	Cristian Dezso	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	Th 6:25pm - 10:00pm	DC C2
	Contact instructor or department for details.	
GS01	Charles Olson	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	Tu 6:25pm - 10:00pm	BLD2 2032

BUSI690

Strategic Management

(Perm req)

Credits: 2

Grading Method: Regular

Restriction: Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)). Credit only granted for: BUSI690 or BMGT614.

Analyze and identify profit opportunities and threats in different industry and competitive environments; Analyze and identify a firm's valuable assets, resources and capabilities and how they might be protected, leveraged, and extended in the market; Learn how to organize your company to be the best prepared to adapt its strategy over time as the market environment changes; and how to use organic growth as well as mergers, acquisitions, joint ventures, alliances, and divestitures to ensure that the firm maintains the proper scale and scope to compete effectively over time.

BA01	Paulo Prochno Meets August 26, 2019 - October 14, 2019 M 6:25pm - 10:00pm	Seats (Total: 0) BA 104
DC01	Paulo Prochno Meets August 26, 2019 - October 14, 2019 W 6:25pm - 10:00pm	Seats (Total: 0) DC C2
DC02	Paulo Prochno Meets August 26, 2019 - October 14, 2019 Th 6:25pm - 10:00pm	Seats (Total: 0) DC C1
GS01	Evan Starr Meets August 26, 2019 - October 14, 2019 Tu 6:25pm - 10:00pm	Seats (Total: 0) BLD2 2032

BUSI758D

(Perm req)

Special Topics in Business; Data Driven Decision Making II

Credits: 2

Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

BA01	Sujin Kim Meets October 21, 2019 - December 10, 2019 Th 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) BA 104
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DC01	Maria Bardossy Meets October 21, 2019 - December 10, 2019 M 6:25pm - 10:00pm	Seats (Total: 0) DC C3
DC02	Mohan Sundaram Meets October 21, 2019 - December 10, 2019 Tu 6:25pm - 10:00pm	Seats (Total: 0) DC C3
GS01	Maria Bardossy Meets October 21, 2019 - December 10, 2019 W 6:25pm - 10:00pm Contact instructor or department for details.	Seats (Total: 0) BLD2 2032

BUSI758E

(Perm req)

Special Topics in Business; Fundamentals of Business Decision Making

Credits: 2

Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

BA01	Progyan Basu Meets August 17, 2019 - September 9, 2019 SaSu 8:30am - 5:30pm Contact instructor or department for details. <i>Meets 8/17, 8/18, 8/24, and 8/25.</i>	Seats (Total: 0) Location: TBA
DC01	Paulo Prochno Meets August 17, 2019 - September 9, 2019 SaSu 8:30am - 5:30pm Contact instructor or department for details. <i>Meets 8/17, 8/18, 8/24, and 8/25.</i>	Seats (Total: 0) Location: TBA

BUSI759

(Perm req)

Independent Study in Business

Credits: 1-6

Grading Method: Regular

Independent study for Masters students in Business.

Contact department for information to register for this course.

BUSI788B Introduction to Global Business Experience; Doing Business in Brazil

Credits: 2 Grading Method: Regular

Introduction to the economic climate of the country and region, history, political influences on business landscape, and specific opportunities and threats of doing business in the destination country. Course is a prerequisite to short-term study abroad classes.

GX01	Paulo Prochno	Seats (Total: 32)
	Meets August 26, 2019 - December 10, 2019	
	Su 12:00pm - 2:00pm	Location: TBA

BUSI788C Introduction to Global Business Experience; Doing Business in China

Credits: 2 Grading Method: Regular

Introduction to the economic climate of the country and region, history, political influences on business landscape, and specific opportunities and threats of doing business in the destination country. Course is a prerequisite to short-term study abroad classes.

GX01	Zhi-Long Chen	Seats (Total: 32)
	Meets August 26, 2019 - December 10, 2019	
	Su 12:00pm - 2:00pm	Location: TBA

BUSI788J Introduction to Global Business Experience; Doing Business in South Africa

Credits: 2 Grading Method: Regular

Introduction to the economic climate of the country and region, history, political influences on business landscape, and specific opportunities and threats of doing business in the destination country. Course is a prerequisite to short-term study abroad classes.

GX01	Bennet Zelner	Seats (Total: 32)
	Meets August 26, 2019 - December 10, 2019	
	Su 12:00pm - 2:00pm	Location: TBA

BUSI788M Introduction to Global Business Experience; Doing Business in the UAE

Credits: 2 Grading Method: Regular

Introduction to the economic climate of the country and region, history, political influences on business landscape, and specific opportunities and threats of doing business in the destination country. Course is a prerequisite to short-term study abroad classes.

GX01	Mark Wellman	Seats (Total: 32)
	Meets August 26, 2019 - December 10, 2019	
	Su 12:00pm - 2:00pm	Location: TBA

BUSI788Y Introduction to Global Business Experience; Doing Business in Japan and Singapore

Credits: 2 Grading Method: Regular

Introduction to the economic climate of the country and region, history, political influences on business landscape, and specific opportunities and threats of doing business in the destination country. Course is a prerequisite to short-term study abroad classes.

GX01	Cristian Dezso	Seats (Total: 32)
	Meets August 26, 2019 - December 10, 2019	
	Su 12:00pm - 2:00pm	Location: TBA

BUSI799 Masters Thesis Research

(Perm req) Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

BUSM Full-Time MBA Program Fall 2019

Courses with the BUSM prefix are offered only for students in the full- time MBA program.

BUSM600 Leadership and Teamwork

(Perm req) Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BMGT600, BUSI662 or BUSM600.

Course examines concepts of team-building and leadership which are critical to managerial success. Topics include leadership, decision making, communication and conflict, work motivation, building effective teams, and organizational change and culture.

0101	Neta Moye	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	Th 10:00am - 11:50am	VMH 2511
0201	Neta Moye	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	Tu 10:00am - 11:50am	VMH 2511

BUSM602

Introduction to Financial Accounting

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI610 or BUSM602.

Overview of financial accounting, periodic financial statements and the financial reporting process. Importance of financial statements as information source for creditors and investors and as a means by which managers can communicate information about their firms.

0101	Rebecca Hann	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 12:00pm - 1:50pm	VMH 2505
0201	Rebecca Hann	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 10:00am - 11:50am	VMH 2505

BUSM604

Managerial Economics and Public Policy

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI681 or BUSM604.

Basic microeconomic principles used by firms, including supply and demand, elasticities, costs, productivity, pricing, market structure and competitive implications of alternative market structures. Market failures and government intervention. Public policy processes affecting business operations.

0101	Rachelle Sampson	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 10:00am - 11:50am	VMH 2511
0201	Rachelle Sampson	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 12:00pm - 1:50pm	VMH 2511

BUSM606

Data Driven Decision Making

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI630 or BUSM606.

Analytical modeling of business decisions; uncertainty, risk and expected utility; regression modeling to infer relationships among variables.

0101	Shreevardhan Lele	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 2:00pm - 3:15pm	VMH 2505
0201	Shreevardhan Lele	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 3:30pm - 4:45pm	VMH 2505

BUSM610

Financial Management

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI640 or BUSM610.

Focuses on the valuation of the real assets of firms as well as the valuation of stocks and bonds, the primary financial assets in an economy. While details vary, the conceptual foundations of valuation boil down to three themes: time value of money, no-arbitrage, and systematic risk.

0101	James Seward	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 3:30pm - 4:45pm	VMH 2511
0201	James Seward	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 2:00pm - 3:15pm	VMH 2511

BUSM612 Marketing Management

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI650 or BUSM612.

Analysis of marketing problems and evaluation of specific marketing efforts regarding the organization's products and services, pricing activities, channel selection, and promotion strategies in both domestic and international markets.

0101	Judy Frels	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 10:00am - 11:50am	VMH 2505
0201	Judy Frels	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 12:00pm - 1:50pm	VMH 2505

BUSM616 Managerial Accounting

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUSI610. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI611 or BUSM616.

Use of accounting data in corporate planning and control. Cost-volume- profit analysis, budgeting, pricing decisions and cost data, transfer pricing, activity-based management, performance measures, and standard costing.

0101	Eugene Cantor	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	TuTh 10:00am - 11:50am	VMH 2505
0201	Eugene Cantor	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	TuTh 8:00am - 9:50am	VMH 2505

BUSM621

Strategic and Transformational IT

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI621 or BUSM621.

Introduces students to the key issues in managing information technolog (IT) and provides an overview of how major IT applications in today's firms support strategic, opertaional, and tactical decisions. Topics include: synchroizing IT and business strategy; the transformational impacts of IT; evaluating and coping with new technologies; governing, managing, and organizing the IT function including outsourcing/offshoring considerations; assessing the business value of IT and justifying IT projects; and managing IT applications in functional areas to support strategy and business process.

0101	Joseph Bailey	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	TuTh 8:00am - 9:50am	VMH 2505
0201	Joseph Bailey	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	TuTh 10:00am - 11:50am	VMH 2505

BUSM706

Innovation & Product Development

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMO758P or BUSM706.

Focuses on the development of innovations - new products or new services - from the perspective of a marketer. For an innovation to be successful in the market, it has to be customer-centric: hence, in this course, we study how to develop and bring to market elegant and efficient solutions to strong customer needs. This is a fundamental business challenge, faced while working in a startup or in an established company; when developing a new product or a new service; and when serving customers who are individuals or large corporations.

0101	Yogesh Joshi	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	TuTh 2:00pm - 3:15pm	VMH 3522

BUSM708

Independent Study in Business

(Perm req)

Credits: 1-6 Grading Method: Regular

Independent study for Masters students in Business.

Contact department for information to register for this course.

BUSM710

Advanced Marketing Analytics Models

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUSM612. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK706 or BUSM705.

Introduction to modeling tools used to support marketing analysis and decision making. Applications in strategic marketing, marketing segmentation, new product development, sales promotion analysis, pricing, design of marketing mix, sales force allocation, and direct marketing. Spreadsheet driven cases and illustrative readings.

0101	Jie Zhang	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 2:00pm - 3:50pm	VMH 1518

BUSM738A

Investment Fund Management; Mayer Fund

(Perm req)

Credits: 3 Grading Method: Regular

Provides second-year Master in Business Administration students with the opportunity to apply the skills learned in finance classes to actual investment decisions through management of an investment fund.

Contact department for information to register for this course.

BUSM741 Financial Restructuring

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: BUSM610. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUFN752 or BUSM741.

Focuses on identifying ways to increase firm value through corporate restructuring. Specific topics include: mergers and tender offers, spin-offs, carve-outs, divestitures, takeover defense strategies, leveraged buy-outs, and international acquisitions. Additionally, the theory, practice and empirical evidence related to each of these topics will be covered. Emphasis will be placed on valuation analysis and strategic considerations.

0101	James Seward	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 2:00pm - 3:50pm	VMH 1518

BUSM752 Games of Strategy and Incentives

Credits: 4 Grading Method: Regular

Prerequisite: Permission of BMGT-Robert H. Smith School of Business. Or BUSM610; and BUSM604; and BUSM614. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

Analysis of managerial decisions in strategic environments using tools from game theory; competition and cooperation in product markets; principal-agent model and the economics of incentives; analytical foundations of behavioral constructs such as reputation, commitment and credibility.

0101	Shreevardhan Lele	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	MW 10:00am - 11:50am	VMH 1505
0201	Shreevardhan Lele	Seats (Total: 25)
	Meets August 26, 2019 - December 10, 2019	
	MW 10:00am - 11:50am	VMH 1505

BUSM754 Competitive and Collaborative Negotiation

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMO714 or BUSM754.

Increase negotiating self-confidence and improve capacity to achieve win-win solutions to organizational problems. Improve effectiveness at finding creative solutions to conflict.

0101	Vijaya Venkataramani Meets August 26, 2019 - October 14, 2019 TuTh 10:00am - 11:50am	Seats (Total: 0) VMH 1505
0201	Vijaya Venkataramani Meets August 26, 2019 - October 14, 2019 TuTh 8:00am - 9:50am	Seats (Total: 0) VMH 1505

BUSM758B Special Topics in Business; Financial Stability and Risk Management

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Haluk Unal Meets October 21, 2019 - December 10, 2019 MW 2:00pm - 3:50pm	Seats (Total: 0) VMH 2505
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BUSM758N Special Topics in Business; Managing Change

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Myeong-Gu Seo Meets October 21, 2019 - December 10, 2019 MW 12:00pm - 1:50pm	Seats (Total: 0) VMH 2511
0201	Myeong-Gu Seo Meets October 22, 2019 - December 10, 2019 MW 12:00pm - 1:50pm	Seats (Total: 0) VMH 2511

BUSM758R Special Topics in Business; Revenue Management

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Yi Xu	Seats (Total: 0)
	Meets October 21, 2019 - December 10, 2019	
	MW 2:00pm - 3:50pm	VMH 2511

BUSM758T Special Topics in Business; Digital Marketing

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Pallassana Kannan	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 2:00pm - 3:50pm	VMH 1511

BUSM758V Special Topics in Business; Supply Chain Management Experience

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Philip Evers	Seats (Total: 0)
	Meets August 26, 2019 - December 10, 2019	
	F 11:00am - 12:50pm	VMH 3330H

BUSM758W Special Topics in Business; Managing Others

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Neta Moye	Seats (Total: 30)
	Meets August 26, 2019 - December 10, 2019	
	F 9:00am - 10:50am	VMH 2511

BUSM758X Special Topics in Business; Process Improvement

(Perm req)

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Humberto Coronado	Seats (Total: 0)
	Meets August 26, 2019 - October 14, 2019	
	MW 2:00pm - 3:50pm	VMH 2505

BUSM778B Introduction to Global Business Experience; Doing Business in Brazil

Credits: 2 Grading Method: Regular

Introduction to the economic climate of the country and region, history political influences on business landscape, and specific opportunities and threats of doing business in the destination country. Course is a prerequisite to short-term study abroad classes.

For full-time MBA students only. Course also listed as BUSI778B, BUSO778B, and EMBA778B for other student populations.

GX01	Paulo Prochno	Seats (Total: 32)
	Meets August 26, 2019 - December 10, 2019	
	Su 12:00pm - 2:00pm	Location: TBA

BUSM778C Introduction to Global Business Experience; Doing Business in China

Credits: 2 Grading Method: Regular

Introduction to the economic climate of the country and region, history political influences on business landscape, and specific opportunities and threats of doing business in the destination country. Course is a prerequisite to short-term study abroad classes.

For full-time MBA students only. Course also listed as BUSI778C, BUSO778C, and EMBA778C for other student populations.

GX01	Zhi-Long Chen	Seats (Total: 32)
	Meets August 26, 2019 - December 10, 2019	
	Su 12:00pm - 2:00pm	Location: TBA

BUSM778J Introduction to Global Business Experience; Doing Business in South Africa

Credits: 2 Grading Method: Regular

Introduction to the economic climate of the country and region, history political influences on business landscape, and specific opportunities and threats of doing business in the destination country. Course is a prerequisite to short-term study abroad classes.

For full-time MBA students only. Course also listed as BUSI778J, BUSO778J, and EMBA778J for other student populations.

GX01	Bennet Zelner	Seats (Total: 32)
	Meets August 26, 2019 - December 10, 2019	
	Su 12:00pm - 2:00pm	Location: TBA

BUSM778M Introduction to Global Business Experience; Doing Business in the UAE

Credits: 2 Grading Method: Regular

Introduction to the economic climate of the country and region, history political influences on business landscape, and specific opportunities and threats of doing business in the destination country. Course is a prerequisite to short-term study abroad classes.

For full-time MBA students only. Course also listed as BUSI778M, BUSO778M, and EMBA778M for other student populations.

GX01	Mark Wellman	Seats (Total: 32)
	Meets August 26, 2019 - December 10, 2019	
	Su 12:00pm - 2:00pm	Location: TBA

BUSM778Y Introduction to Global Business Experience; Doing Business in Japan and Singapore

Credits: 2 Grading Method: Regular

Introduction to the economic climate of the country and region, history political influences on business landscape, and specific opportunities and threats of doing business in the destination country. Course is a prerequisite to short-term study abroad classes.

For full-time MBA students only. Course also listed as BUSI778Y, BUSO778Y, and EMBA778Y for other student populations.

GX01	Cristian Dezso	Seats (Total: 32)
	Meets August 26, 2019 - December 10, 2019	
	Su 12:00pm - 2:00pm	Location: TBA

BUSM798C Business Consulting; Technology Entrepreneurship

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

0101	Brent Goldfarb	Seats (Total: 20)
	Meets August 26, 2019 - December 10, 2019	
	F 9:00am - 10:50am	VMH 2505

BUSO Online MBA Program Fall 2019

BUSO600 Leadership and Teamwork

Credits: 2 Grading Method: Regular

*Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI662, BUSO600 or EMBA656.**Course examines concepts of team-building and leadership which are critical to managerial success. Topics include leadership, decision making, communication and conflict, work motivation, building effective teams, and organizational change and culture.*

SO11	Gregory Marr	Seats (Total: 24)
	Meets August 26, 2019 - October 12, 2019	
	M 7:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE
SO12	Gregory Marr	Seats (Total: 24)
	Meets August 26, 2019 - October 12, 2019	
	M 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE
SO13	Gosia Langa Basit	Seats (Total: 24)
	Meets August 26, 2019 - October 12, 2019	
	M 7:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE

SO15	Nicole Coomber Meets August 26, 2019 - October 12, 2019 Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO16	Nicole Coomber Meets August 26, 2019 - October 12, 2019 Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO17	Trevor Foulk Meets August 26, 2019 - October 12, 2019 Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO18	Trevor Foulk Meets August 26, 2019 - October 12, 2019 Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE

BUSO601

Corporate Finance I

Credits: 2 Grading Method: Regular

Prerequisite: BUSO602. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

Introductory course in corporate financial management. The course outlines the financial concepts and techniques used to evaluate corporate decisions. The topics include the time value of money, valuation of common securities, capital budgeting methods, and discounted cash flow. The objectives are to introduce the language and structure of finance and to develop the ability to analyze financial decisions.

SO11	Ceyed Baiju Meets October 14, 2019 - December 7, 2019 M 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
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SO12	Ceyed Baiju Meets October 14, 2019 - December 7, 2019 M 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO13	Elinda Kiss Meets October 14, 2019 - December 7, 2019 Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO14	Elinda Kiss Meets October 14, 2019 - December 7, 2019 Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO15	Ceyed Baiju Meets October 14, 2019 - December 7, 2019 Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO16	Ceyed Baiju Meets October 14, 2019 - December 7, 2019 Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO17	Joel Naroff Meets October 14, 2019 - December 7, 2019 Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO18	Joel Naroff Meets October 14, 2019 - December 7, 2019 Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE

BUSO602**Financial Accounting**

Credits: 2

Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: EMBA610 or BUSO602.

Overview of financial accounting, periodic financial statements and the financial reporting process. Importance of financial statements as information source for creditors and investors and as a means by which managers can communicate information about their firms.

SO11	Samuel Handwerger Meets August 26, 2019 - October 12, 2019 W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO12	Samuel Handwerger Meets August 26, 2019 - October 12, 2019 W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO13	Stephen Brown Meets August 26, 2019 - October 12, 2019 W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO14	Stephen Brown Meets August 26, 2019 - October 12, 2019 W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO15	Progyan Basu Meets August 26, 2019 - October 12, 2019 Th 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE

SO16	Progyan Basu Meets August 26, 2019 - October 12, 2019 Th 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE
SO17	William Ford Meets August 26, 2019 - October 12, 2019 Th 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 23) ONLINE ONLINE

BUSO614

Strategic Management

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSI690, BUSM614 or BUSO614.

Analyze and identify profit opportunities and threats in different industry and competitive environments; Analyze and identify a firm's valuable assets, resources and capabilities and how they might be protected, leveraged, and extended in the market; Learn how to organize your company to be the best prepared to adapt its strategy over time as the market environment changes; and how to use organic growth as well as mergers, acquisitions, joint ventures, alliances, and divestitures to ensure that the firm maintains the proper scale and scope to compete effectively over time.

SO31	Clarence Wesley Meets October 14, 2019 - December 7, 2019 M 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO32	Clarence Wesley Meets October 14, 2019 - December 7, 2019 M 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO33	Melanie Cohen Meets October 14, 2019 - December 7, 2019 M 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE

SO34	Melanie Cohen Meets October 14, 2019 - December 7, 2019 M 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO35	Paulo Prochno Meets October 14, 2019 - December 7, 2019 Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO36	Paulo Prochno Meets October 14, 2019 - December 7, 2019 Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO37	Clarence Wesley Meets October 14, 2019 - December 7, 2019 Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE

BUSO700

Fundamentals of Business

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

This course introduces students to the language of business. Topics covered include financial accounting, financial management, data models, strategy, leadership and teamwork, and a brief action learning project on innovation. Pre-work includes the DISC assessment, and a requires a passing grade on a spreadsheet pre-work course.

SO91	Judy Frels Meets August 15, 2019 - August 17, 2019 ThFSa 8:00am - 8:00pm	Seats (Total: 100) Location: TBA
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BUSO701

Integrative Business Capstone

Credits: 2 Grading Method: Sat-Fail

Prerequisite: Students must have completed a minimum of 48 credit hours. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

This is an experiential course that involves an integrative business experience. This experience may be simulated through a software package or through content, speakers and events that are based in a realistic business setting. Students compete in teams. Each team makes decisions in areas such as human resources, compensation packages, geographic expansion through sales offices, debt versus equity financing, manufacturing and inventory management, marketing, including pricing, advertising and product design. The impact of each of these decisions flows through the three financial statements and results in financial outcomes and ratios that measure the success of each team. Additional metrics include stakeholders beyond investors such as employee morale, community engagement, and environmental impact. Students compete for financing and for customers. Multiple presentations are made by students during the simulation to explain their strategy, their tactics, and their planned investments.

SO92	Cristian Dezso	Seats (Total: 100)
	Meets December 15, 2019 - December 17, 2019	
	MTuSu 8:00am - 8:00pm	Location: TBA

BUSO706

Organizational Change

Credits: 2 Grading Method: Regular

Prerequisite: BUSM600; or BUSO600; or BUSI662; or EMBA656. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUSO706 or BUSM755.

Develops the advanced knowledge and skills of MBA students who plan to work with organizations as change agents. Concrete and useful strategies, tools, and interventions for diagnosing organizational change situations, analyzing problems, and designing and implementing organizational change. Draws on literature from organizational behavior, human resource management and strategic management to identify models as prescriptions of change.

SO31	Myeong-Gu Seo	Seats (Total: 24)
	Meets August 26, 2019 - October 12, 2019	
	W 7:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE

SO32	Myeong-Gu Seo Meets August 26, 2019 - October 12, 2019 W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO33	Adina Dabu Meets August 26, 2019 - October 12, 2019 W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO34	Sheetal Singh Meets August 26, 2019 - October 12, 2019 W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO35	Sirkwoo Jin Meets August 26, 2019 - October 12, 2019 Th 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO36	Sirkwoo Jin Meets August 26, 2019 - October 12, 2019 Th 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE
SO38	Sheetal Singh Meets August 26, 2019 - October 12, 2019 Th 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 24) ONLINE ONLINE

BUSO712
Entrepreneurship

Credits: 2

Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

Introduces students to tools and skills needed to create and grow a successful new venture. The course integrates research findings from a range of different practical and intellectual perspectives, including psychology, sociology, economics, strategic management, and history into practical, hands on lessons for an entrepreneur. Class projects teach skills to explore high-risk business ideas in inexpensive ways and allow students to experience the entrepreneurial environment. A startup is an organization formed to search for a repeatable and scalable business model (Steve Blank). Entrepreneurship is about pursuing hunches about solutions to customer problems and thereby creating value. Testing these hunches requires getting customers to evaluate solutions. It is difficult to attract resources (either human or financial) before it is known if the hunch is correct, but testing hunches requires resources. This course provides iterative tools to solve this chicken and egg problem. We will also focus on specific skill building exercises, such as pitching and networking.

SO11	Brent Goldfarb Meets October 14, 2019 - December 7, 2019 W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO12	Azi Gera Meets October 14, 2019 - December 7, 2019 W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO13	Azi Gera Meets October 14, 2019 - December 7, 2019 W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO14	David Kirsch Meets October 14, 2019 - December 7, 2019 Th 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO15	David Kirsch Meets October 14, 2019 - December 7, 2019 Th 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

SO16	David Kressler	Seats (Total: 25)
	Meets October 14, 2019 - December 7, 2019	
	Th 7:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE

BUSO731 Social Media and Web Analytics

Credits: 2 Grading Method: Regular

Prerequisite: BUSM612; or BUSO612; or BUSI650. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK758O, BUSO731 or BUSM716.

Examines the process of developing, implementing, and analyzing strategies for successfully marketing a variety of existing and potential products and services using electronic media. Besides well-established Internet marketing tools such as e-mail, search engines and display advertising, a substantial part of the course is dedicated to understanding social media, analyzing successful social media strategies, and tracking their effectiveness. The course offers hands-on experience with many popular as well as emerging techniques unique to electronic media. Special attention is given to metrics appropriate for the new media.

SO51	Sivakumar Viswanathan	Seats (Total: 25)
	Meets October 14, 2019 - December 7, 2019	
	W 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE
SO52	Sivakumar Viswanathan	Seats (Total: 25)
	Meets October 14, 2019 - December 7, 2019	
	Th 7:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE
SO53	Sivakumar Viswanathan	Seats (Total: 25)
	Meets October 14, 2019 - December 7, 2019	
	Th 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE

BUSO741 Consumer Behavior

Credits: 2 Grading Method: Regular

Prerequisite: BUSM612; or BUSO612; or BUSI650. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BUMK715, BUSM702 or BUSO741.

Analysis of customer decision-making and how marketing strategy can be used to influence those decisions. The framework is a buyer behavior model, in which concepts from psychology, sociology, and economics are applied to individual and organizational purchase decisions. Marketing strategies of leading firms in consumer products, technology, and services (including internet services) are analyzed using a variety of case study formats. Focus is consumer behavior; however, principles can also be applied to the decision-making of business.

SO51	Rosellina Ferraro Meets October 14, 2019 - December 7, 2019 W 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO52	Rosellina Ferraro Meets October 14, 2019 - December 7, 2019 W 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE
SO53	Rosellina Ferraro Meets October 14, 2019 - December 7, 2019 Th 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 25) ONLINE ONLINE

BUSO751

Supply Chain Risk Management

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BULM734, BUSM784 or BUSO751.

Supply chain managers are facing an increasingly volatile operating environment, with constant danger of trading community disruption from business, social and environmental risks. Students are provided with a working knowledge of both the core techniques of supply chain risk assessment and mitigation; as well as best practices in establishing formal corporate supply chain risk management programs. A semester-long X-Treme Supply Chain Simulation will enable students to gain hands-on experience in navigating a computer company through a complex and risky four quarters of global business operations.

SO51	Sandor Boyson	Seats (Total: 25)
	Meets October 14, 2019 - December 7, 2019	
	Th 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE
SO52	Sandor Boyson	Seats (Total: 25)
	Meets October 14, 2019 - December 7, 2019	
	Th 7:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE

BUSO758G Special Topics in Business; Financial Restructuring

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

SO51	Richmond Mathews	Seats (Total: 25)
	Meets October 14, 2019 - December 7, 2019	
	Th 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE
SO52	Richmond Mathews	Seats (Total: 25)
	Meets October 14, 2019 - December 7, 2019	
	Th 7:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE

BUSO758J Special Topics in Business; Corporate Finance II

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in business.

SO31	Ceyed Baiju	Seats (Total: 22)
	Meets August 26, 2019 - October 12, 2019	
	M 7:00pm - 8:30pm	ONLINE
	Class time/details on ELMs	ONLINE

SO32	Elinda Kiss, Susan White Meets August 26, 2019 - October 12, 2019 M 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO33	Ceyed Baiju Meets August 26, 2019 - October 12, 2019 M 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO34	Ceyed Baiju Meets August 26, 2019 - October 12, 2019 Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO35	Ceyed Baiju Meets August 26, 2019 - October 12, 2019 Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO36	Elinda Kiss Meets August 26, 2019 - October 12, 2019 Tu 7:00pm - 8:30pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE
SO37	Elinda Kiss Meets August 26, 2019 - October 12, 2019 Tu 8:45pm - 10:15pm Class time/details on ELMs	Seats (Total: 22) ONLINE ONLINE

BUSO778B

Global Business Experience; Doing Business in Brazil

Credits: 2

Grading Method: Regular

Provides MBA students the opportunity to combine classroom learning and project research with seminars in a host country. The focus and locations visited will vary.

For Online MBA students only. Course also listed as BUSI778B, BUSM778B, and EMBA778B for other student populations.

Contact department for information to register for this course.

BUSO778C Global Business Experience; Doing Business in China

Credits: 2 Grading Method: Regular

Provides MBA students the opportunity to combine classroom learning and project research with seminars in a host country. The focus and locations visited will vary.

For Online MBA students only. Course also listed as BUSI778C, BUSM778C, and EMBA778C for other student populations.

Contact department for information to register for this course.

BUSO778J Global Business Experience; Doing Business in South Africa

Credits: 2 Grading Method: Regular

Provides MBA students the opportunity to combine classroom learning and project research with seminars in a host country. The focus and locations visited will vary.

For Online MBA students only. Course also listed as BUSI778J, BUSM778J, and EMBA778J for other student populations.

Contact department for information to register for this course.

BUSO778M Global Business Experience; Doing Business in the UAE

Credits: 2 Grading Method: Regular

Provides MBA students the opportunity to combine classroom learning and project research with seminars in a host country. The focus and locations visited will vary.

For Online MBA students only. Course also listed as BUSI778M, BUSM778M, and EMBA778M for other student populations.

Contact department for information to register for this course.

BUSO778Y Global Business Experience; Doing Business in Japan and Singapore

Credits: 2 Grading Method: Regular

Provides MBA students the opportunity to combine classroom learning and project research with seminars in a host country. The focus and locations visited will vary.

For Online MBA students only. Course also listed as BUSI778Y, BUSM778Y, and EMBA778Y for other student populations.

Contact department for information to register for this course.

Financial Planning and Control Systems for Managers and Consultants

Prerequisite: Permission of BMGT-Robert H. Smith School of Business. Or BUSO616; and BUSO602. Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business. Credit only granted for: BMGT711 or BUSO782. Formerly: BMGT711.

This course provides an analysis of several topics concerning financial planning/control systems (management accounting systems). Topics covered: design and use of cost management systems (including activity based costing systems), financial performance measures for enhancing firm value, managerial incentive contracts and accounting data, management accounting and Internet-based transactions, managing earnings and financial ratios, use of balanced scorecard to evaluate financial/nonfinancial managerial performance, management accounting systems and competitor analysis, behavioral aspects of budgeting, post-auditing of capital investments, accounting/economics aspects of information security, and transfer pricing.

SO51	Lei Zhou	Seats (Total: 25)
	Meets October 14, 2019 - December 7, 2019	
	Th 8:45pm - 10:15pm	ONLINE
	Class time/details on ELMs	ONLINE

Fall 2019

Special Topics in Cell Biology and Molecular Genetics; Research Experiences

Presentation and discussion of fundamental problems and special subjects in the topics of Cell Biology and Molecular Genetics.

0101	Kevin McIver	Seats (Total: 20)
	Tu 12:00pm - 3:00pm	MCB 2119
	Contact instructor or department for details.	
0201	Stephen Mount	Seats (Total: 20)
	Contact instructor or department for details.	

Special Topics in Cell Biology and Molecular Genetics

Credits: 3 Grading Method: Regular, Audit

Jointly offered with BSCI420. Credit only granted for BSCI420 or CBMG688 C.

0101	Norma Andrews	Seats (Total: 60)
	TuTh 12:30pm - 1:45pm	PLS 1130

Credits: 2 Grading Method: Regular,
Audit

0101	Sougata Roy, Wenxia Song	Seats (Total: 30)
	Meets October 14, 2019 - December 9, 2019	
	TuTh 4:00pm - 6:00pm	MCB 1207

Credits: 2 Grading Method: Regular,
Audit

0101	Roy Mariuzza, David Mosser	Seats (Total: 20)
	Meets August 26, 2019 - October 11, 2019	
	MW 4:00pm - 6:00pm	MCB 2119

Credits: 2 Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subjects in the topics of Cell Biology and Molecular Genetics.

0101	Margaret Scull, Jeffrey DeStefano	Seats (Total: 20)
	Meets October 14, 2019 - December 9, 2019	
	MW 3:00pm - 5:00pm	BRB 1210

CBMG688M Special Topics in Cell Biology and Molecular Genetics; Microbial Genetics

Credits: 2 Grading Method: Regular,
 Audit

Presentation and discussion of fundamental problems and special subjects in the topics of Cell Biology and Molecular Genetics.

0101	Vincent Lee, Daniel Stein	Seats (Total: 15)
	Meets October 14, 2019 - December 9, 2019	
	MW 8:00am - 9:50am	HJP 2119

CBMG688N Special Topics in Cell Biology and Molecular Genetics; Write Science Using the Movies

(Perm req)

Credits: 2 Grading Method: Regular

Presentation and discussion of fundamental problems and special subjects in the topics of Cell Biology and Molecular Genetics.

0101	Antony Jose	Seats (Total: 10)
	Meets August 26, 2019 - October 11, 2019	
	TuTh 4:00pm - 6:00pm	MCB 1123

CBMG688P Special Topics in Cell Biology and Molecular Genetics; Programming for Biology

Credits: 2 Grading Method: Regular,
 Audit

Presentation and discussion of fundamental problems and special subjects in the topics of Cell Biology and Molecular Genetics.

0101	Stephen Mount, Najib El-Sayed	Seats (Total: 12)
	Meets October 14, 2019 - December 9, 2019	
	MW 2:00pm - 3:50pm	MCB 2119

CBMG688Y Special Topics in Cell Biology and Molecular Genetics; Bioinformatics and Genomics

Credits: 2 Grading Method: Regular, Audit

Presentation and discussion of fundamental problems and special subjects in the topics of Cell Biology and Molecular Genetics.

0101	Najib El-Sayed, Michael Cummings	Seats (Total: 24)
	Meets August 26, 2019 - October 11, 2019	
	TuTh 9:00am - 10:50am	IRB 3137

CBMG699 Special Problems in Cell Biology and Molecular Genetics

Credits: 1-3 Grading Method: Regular, Audit

Emphasis is placed on research and discussion of current problems in the area of Cell Biology and Molecular Genetics.

Contact department for information to register for this course.

CBMG699B Special Problems in Cell Biology and Molecular Genetics; Responsible Conduct of Research II

(Perm req) Credits: 1 Grading Method: Regular, Audit

Emphasis is placed on research and discussion of current problems in the area of Cell Biology and Molecular Genetics.

Prerequisite: BISI712 or equivalent.

0101	Charles Delwiche	Seats (Total: 20)
	Meets October 14, 2019 - December 9, 2019	
	Th 2:00pm - 4:00pm	MCB 1129

CBMG699D Special Problems in Cell Biology and Molecular Genetics; Molecular Genetics: Bioinformatics and Computation Biology

Credits: 1 Grading Method: Regular, Audit

Emphasis is placed on research and discussion of current problems in the area of Cell Biology and Molecular Genetics.

0101	Stephen Mount	Seats (Total: 20)
	Contact instructor or department for details.	

CBMG699K Special Problems in Cell Biology and Molecular Genetics; Biological Sciences Teaching and Learning in Higher Education

(Perm req)

Credits: 2 Grading Method: Regular

Emphasis is placed on research and discussion of current problems in the area of Cell Biology and Molecular Genetics.

Cross-listed with BIOL608K, CHEM608K, and ENTM699K. Credit will be granted for only one of the following: BIOL608K, CBMG699K, CHEM608K, or ENTM699K.

0101	Gili Ad-Marbach	Seats (Total: 12)
	W 11:00am - 12:40pm	BPS 1208

CBMG699X Special Problems in Cell Biology and Molecular Genetics; Host Pathogen Interactions

Credits: 1 Grading Method: Regular,
Audit

Emphasis is placed on research and discussion of current problems in the area of Cell Biology and Molecular Genetics.

0101	David Mosser	Seats (Total: 20)
	F 9:00am - 10:30am	MCB 2119

CBMG699Y Special Problems in Cell Biology and Molecular Genetics; Plant Cell Biology Journal Club

Credits: 1 Grading Method: Regular,
Audit

Emphasis is placed on research and discussion of current problems in the area of Cell Biology and Molecular Genetics.

0101	Zhongchi Liu	Seats (Total: 20)
	M 11:00am - 12:00pm	BRB 3101

CBMG699Z Special Problems in Cell Biology and Molecular Genetics; Protein Translation

Credits: 1 Grading Method: Regular,
Audit

Emphasis is placed on research and discussion of current problems in the area of Cell Biology and Molecular Genetics.

0101	Jonathan Dinman	Seats (Total: 20)
	F 9:30am - 10:30am	MCB 1121

CBMG799 Masters Thesis Research

Credits: 1-6 Grading Method: Regular, Sat-Fail

Master's Thesis Research in Cell Biology and Molecular Genetics.

Contact department for information to register for this course.

CBMG898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Pre-candidacy Research.

Contact department for information to register for this course.

CBMG899 Doctoral Dissertation Research

(Perm req) Credits: 6 Grading Method: Regular, Sat-Fail

Doctoral Dissertation Research.

Contact department for information to register for this course.

CCJS Criminology and Criminal Justice Fall 2019

CCJS100 Introduction to Criminal Justice

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS

Introduction to the administration of criminal justice in a democratic society, with emphasis on the theoretical and historical development of law enforcement. The principles of organization and administration for law enforcement; functions and specific activities; planning and research; public relations; personnel and training; inspection and control; direction; policy formulation.

0101	Justine Madoo, Jessica Miller	Seats (Total: 30)
	MW 9:00am - 9:50am	LEF 2205
	M 10:00am - 10:50am	TWS 1106 Discussion
0102	Justine Madoo, Jessica Miller	Seats (Total: 30)
	MW 9:00am - 9:50am	LEF 2205
	M 11:00am - 11:50am	SQH 1107 Discussion

0103	Justine Madoo, Jessica Miller MW 9:00am - 9:50am M 12:00pm - 12:50pm	Seats (Total: 30) LEF 2205 ASY 3215	Discussion
0104	Jessica Miller, Justine Madoo MW 9:00am - 9:50am M 1:00pm - 1:50pm	Seats (Total: 30) LEF 2205 KNI 1103	Discussion
0105	Jessica Miller, Justine Madoo MW 9:00am - 9:50am W 10:00am - 10:50am	Seats (Total: 30) LEF 2205 LEF 1220	Discussion
0106	Justine Madoo, Jessica Miller MW 9:00am - 9:50am W 11:00am - 11:50am	Seats (Total: 30) LEF 2205 SQH 1107	Discussion
0107	Justine Madoo, Jessica Miller MW 9:00am - 9:50am W 12:00pm - 12:50pm	Seats (Total: 30) LEF 2205 ASY 3215	Discussion
0108	Justine Madoo, Jessica Miller MW 9:00am - 9:50am W 1:00pm - 1:50pm	Seats (Total: 30) LEF 2205 LEF 1220	Discussion
0201	Jessica Miller, Justine Madoo MW 11:00am - 11:50am Tu 9:30am - 10:20am	Seats (Total: 30) TYD 0130 KNI 1105	Discussion
0202	Jessica Miller, Justine Madoo MW 11:00am - 11:50am Tu 8:30am - 9:20am	Seats (Total: 30) TYD 0130 ASY 3215	Discussion
0203	Jessica Miller, Justine Madoo MW 11:00am - 11:50am Tu 12:30pm - 1:20pm	Seats (Total: 30) TYD 0130 SQH 1121	Discussion
0204	Justine Madoo, Jessica Miller MW 11:00am - 11:50am Tu 11:00am - 11:50am	Seats (Total: 30) TYD 0130 PHY 0405	Discussion

0205	Jessica Miller, Justine Madoo MW 11:00am - 11:50am Th 8:30am - 9:20am	Seats (Total: 30) TYD 0130 ASY 3215	Discussion
0206	Jessica Miller, Justine Madoo MW 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 30) TYD 0130 PLS 1117	Discussion
0207	Jessica Miller, Justine Madoo MW 11:00am - 11:50am Th 9:30am - 10:20am	Seats (Total: 30) TYD 0130 SQH 1121	Discussion
0208	Jessica Miller, Justine Madoo MW 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 30) TYD 0130 SQH 1103	Discussion
FC01	Kyle Dorsey MW 6:00pm - 7:15pm <i>Restricted to students in Freshman Connection.</i>	Seats (Total: 35) TWS 1100	

CCJS105

Introduction to Criminology

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS

Criminal behavior and the methods of its study; causation; typologies of criminal acts and offenders; punishment, correction and incapacitation; prevention of crime.

0101	Kyle Dorsey MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 30) SKN 0200 ESJ 0215	Discussion
0102	Kyle Dorsey MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 30) SKN 0200 ESJ 0215	Discussion
0103	Kyle Dorsey MW 10:00am - 10:50am Th 2:00pm - 2:50pm	Seats (Total: 30) SKN 0200 ESJ 0215	Discussion

0104	Kyle Dorsey MW 10:00am - 10:50am Th 2:00pm - 2:50pm	Seats (Total: 30) SKN 0200 ESJ 0215	Discussion
0105	Kyle Dorsey MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 30) SKN 0200 ESJ 0215	Discussion
0106	Kyle Dorsey MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 30) SKN 0200 ESJ 0215	Discussion
0107	Kyle Dorsey MW 10:00am - 10:50am F 12:00pm - 12:50pm	Seats (Total: 30) SKN 0200 ESJ 0215	Discussion
0108	Kyle Dorsey MW 10:00am - 10:50am F 12:00pm - 12:50pm	Seats (Total: 30) SKN 0200 ESJ 0215	Discussion
0201	Kyle Dorsey TuTh 12:30pm - 1:20pm Th 9:30am - 10:20am	Seats (Total: 30) SKN 0200 TWS 1100	Discussion
0202	Kyle Dorsey TuTh 12:30pm - 1:20pm Th 9:30am - 10:20am	Seats (Total: 30) SKN 0200 TWS 1100	Discussion
0203	Kyle Dorsey TuTh 12:30pm - 1:20pm Th 11:00am - 11:50am	Seats (Total: 30) SKN 0200 ESJ 2309	Discussion
0204	Kyle Dorsey TuTh 12:30pm - 1:20pm Th 11:00am - 11:50am	Seats (Total: 30) SKN 0200 ESJ 2309	Discussion
0205	Kyle Dorsey TuTh 12:30pm - 1:20pm F 1:00pm - 1:50pm	Seats (Total: 30) SKN 0200 ESJ 0215	Discussion

0206	Kyle Dorsey TuTh 12:30pm - 1:20pm F 1:00pm - 1:50pm	Seats (Total: 30) SKN 0200 ESJ 0215	Discussion
0207	Kyle Dorsey TuTh 12:30pm - 1:20pm F 2:00pm - 2:50pm	Seats (Total: 30) SKN 0200 ESJ 0215	Discussion
0208	Kyle Dorsey TuTh 12:30pm - 1:20pm F 2:00pm - 2:50pm	Seats (Total: 30) SKN 0200 ESJ 0215	Discussion
FC01	Mei Yang MW 4:30pm - 5:45pm	Seats (Total: 35) TYD 1132	

CCJS200

(Perm req)

Statistics for Criminology and Criminal Justice

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: FSAR

Prerequisite: CCJS100 or CCJS105. And 1 course with a minimum grade of C- from (STAT100, MATH107, MATH111, MATH120, MATH130, MATH135, MATH140); or must have completed MATH220 with a minimum grade of C-. Restriction: Must be in Criminology and Criminal Justice program; or permission of BSOS-Criminology & Criminal Justice department. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introduction to descriptive and inferential statistics, graphical techniques, and the computer analysis of criminology and criminal justice data. Basic procedures of hypothesis testing, correlation and regression analysis, and the analysis of continuous and binary dependent variables. Emphasis upon the examination of research problems and issues in criminology and criminal justice.

0201	Alan Lehman TuTh 9:30am - 10:45am Th 11:00am - 11:50am	Seats (Total: 30) LEF 2205 PHY 0405	Discussion
0202	Alan Lehman TuTh 9:30am - 10:45am Th 12:30pm - 1:20pm	Seats (Total: 30) LEF 2205 SQH 1121	Discussion
0203	Alan Lehman TuTh 9:30am - 10:45am Th 2:00pm - 2:50pm	Seats (Total: 30) LEF 2205 JMZ 0208	Discussion

0204	Alan Lehman	Seats (Total: 30)	
	TuTh 9:30am - 10:45am	LEF 2205	
	F 12:00pm - 12:50pm	ASY 3211	Discussion
0205	Alan Lehman	Seats (Total: 30)	
	TuTh 9:30am - 10:45am	LEF 2205	
	F 11:00am - 11:50am	ASY 3203	Discussion
0206	Alan Lehman	Seats (Total: 30)	
	TuTh 9:30am - 10:45am	LEF 2205	
	F 1:00pm - 1:50pm	EDU 3315	Discussion

CCJS225

Responses to Violence

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, DSSP, SCIS

Conflict is unfortunately resolved through violence in a number of settings. It ranges from interpersonal to international in its scope. This course investigates the strengths and weakness of a number of resolutions to reducing violence over the course of history using both state centered and informal control.

0101	Min Xie	Seats (Total: 50)	
	MW 2:00pm - 3:15pm	ESJ 1215	
0201	Kyle Dorsey	Seats (Total: 50)	
	MWF 11:00am - 11:50am	ESJ 1215	

CCJS230

Criminal Law in Action

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: CCJS100.

Law as one of the methods of social control. Criminal law: its nature, sources and types; theories and historical developments. Behavioral and legal aspects of criminal acts. Classification and analysis of selected criminal offenses.

0101	Cortney Fisher	Seats (Total: 100)	
	MWF 10:00am - 10:50am	TWS 0310	
0201	Russell Hamill	Seats (Total: 100)	
	W 4:00pm - 6:30pm	KEY 0106	

CCJS300**Criminological and Criminal Justice Research Methods**

(Perm req)

Credits: 3

Grading Method: Regular

General Education: DSSP

*Prerequisite: CCJS100 and CCJS105; and (PSYC200, CCJS200, ECON321, BMGT230, or SOCY201).**Introduction to the formulation of research questions covering crime and justice, research designs, data collection, and interpretation and reporting in criminological and justice-system settings.*

0101	Laure Brooks MWF 9:00am - 9:50am	Seats (Total: 60) LEF 2166
0201	Laure Brooks MWF 11:00am - 11:50am	Seats (Total: 60) LEF 2166
0301	Alan Lehman TuTh 12:30pm - 1:45pm	Seats (Total: 60) LEF 2166
0401	Alan Lehman TuTh 11:00am - 12:15pm	Seats (Total: 60) LEF 2166
SG91	Wendy Stickle W 9:30am - 12:00pm <i>Restricted to CCJS students at Shady Grove.</i>	Seats (Total: 40) BLD3 3240

CCJS310**Criminal Investigations**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit*Prerequisite: CCJS100 and CCJS230.**An introduction to modern methods used in detection, investigation, and solution of crime. Students will be taught basic and advanced investigative techniques utilized by law enforcement agencies. Analysis of actual cases will be used to demonstrate practical uses of these techniques.*

SG92	David Anderson Th 9:30am - 12:00pm <i>Registration is restricted to Biological Sciences-Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci@umd.edu for permission.</i>	Seats (Total: 40) BLD2 2052
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CCJS320**Introduction to Criminalistics**

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CCJS100 and CCJS230.

An introduction to modern methods used in the detection, investigation and solution of crimes. Practical analysis of evidence in a crime laboratory, including fingerprints and other impressions, firearms ID and ballistics, hairs and fibers, document examination, and use of polygraph.

Students must pay a \$53.00 lab fee.

0101	Thomas Mauriello	Seats (Total: 24)
	Class time/details on ELMs	ONLINE
	M 11:00am - 1:45pm	MMH 2401 Lab
0201	Thomas Mauriello	Seats (Total: 24)
	Class time/details on ELMs	ONLINE
	M 2:30pm - 5:15pm	MMH 2401 Lab
0301	Thomas Mauriello	Seats (Total: 24)
	Class time/details on ELMs	ONLINE
	M 6:00pm - 8:45pm	MMH 2401 Lab

CCJS325

Slavery in the Twenty First Century: Combating Human Trafficking

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHS,
SCIS

Credit only granted for: CCJS325 or CCJS498R. Formerly: CCJS498R.

The trafficking of human beings in its historical, legal, economic, political and social contexts. Scope of the global problem, different forms of human trafficking, and regional trends and practices. Roles of government, the international community and individual actors. Strategies to combat trafficking.

0101	Christine White	Seats (Total: 60)
	MWF 11:00am - 11:50am	ESJ 2212
0201	Wendy Stickle	Seats (Total: 60)
	M 2:00pm - 4:30pm	ESJ 0215

SG91	Louis Morlier	Seats (Total: 40)
	W 3:30pm - 4:45pm	BLD2 2062
	Class time/details on ELMs	ONLINE
<i>Registration is restricted to Biological Sciences- Shady Grove majors. Permission is required for all other student to enroll in courses at Shady Grove. Please email usgbiosci@umd.edu for permission.</i>		

CCJS330

Contemporary Criminological Issues

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CCJS100 and CCJS105.

Topics may include career criminals, prison overcrowding, prediction, ecological studies of crimes, family and delinquency, entrepreneurship in criminal justice and criminology, and similar criminological problems.

SG91	Edward Pallas	Seats (Total: 40)
	Th 9:30am - 12:00pm	BLD3 3206
<i>Restricted to CCJS students at Shady Grove.</i>		

CCJS331

Contemporary Legal Policy Issues

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CCJS100 and CCJS230.

In-depth examination of selected topics. Criminal responsibility. Socio-legal policy alternatives with regard to deviance. Law enforcement procedures for civil law and similar legal problems. Admissibility of evidence. Representation. Indigent's right to counsel.

SG91	Alan Drew	Seats (Total: 30)
	W 12:30pm - 3:00pm	BLD3 2226
<i>Restricted to CCJS students at Shady Grove.</i>		

CCJS340

Policing

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CCJS100.

Critical issues relating to policing. Topics include police discretion, role of police, use of force, misconduct, police research, administration, personnel, and etc.

0101	Laure Brooks	Seats (Total: 100)
	MWF 10:00am - 10:50am	TYD 0117
0201	David Mitchell	Seats (Total: 75)
	TuTh 2:00pm - 3:15pm	PLS 1130
SG91	Nicole Romeiser	Seats (Total: 40)
	Tu 11:00am - 1:30pm	BLD3 3206
<i>Restricted to CCJS students at Shady Grove.</i>		

CCJS342

Corrections

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CCJS100. Restriction: Must be in a major within the BSOS-Criminology & Criminal Justice department. Credit only granted for: CCJS342 or CCJS452.

Examination of the American correctional system. Identification of historical and contemporary themes, issues, and trends. Evaluation of correctional policies, practices and research.

0101	Sarah Appleby	Seats (Total: 60)
	TuTh 11:00am - 12:15pm	ESJ 0215
0201	Jessica Deitzer	Seats (Total: 60)
	MW 2:00pm - 3:15pm	ASY 1213

CCJS345

Courts and Sentencing

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CCJS100. Restriction: Must be in a major within the BSOS-Criminology & Criminal Justice department.

Contemporary issues in the American court system such as prosecution, sentencing and punishment. Theoretical perspectives on courtroom decision-making integrated with empirical research. Courts and sentencing processes, including initial charging, pretrial detention and final sentencing outcomes. Innovations in courts and sentencing.

0101	Katie Zafft	Seats (Total: 60)
	Class time/details on ELMs	ONLINE

SG91	Carlotta Woodward	Seats (Total: 40)
	M 12:30pm - 1:45pm	BLD3 3206
	Class time/details on ELMs	ONLINE
<i>Restricted to CCJS students at Shady Grove.</i>		

CCJS358B Special Topics in Study Abroad III; Criminology in Scandanavia

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CCJS358E Special Topics in Study Abroad III; Drugs and Drug Prevention in Central Europe

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CCJS359 Field Training in Criminology and Corrections

(Perm req)

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Supervised field training in public or private social agencies. Group meetings, individual conferences and written program reports.

Prerequisites: CCJS 105 or CRIM 220; and CCJS 350 or CRIM 450; and permission of department. For majors only.

Contact department for information to register for this course.

CCJS360 Victimology

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CCJS105.

Overview of the history and theory of victimology. Analysis of victimization patterns with special emphasis on types of victims and crimes. The interaction between victims of crime and the criminal justice system with respect to the role of the victim and the services offered to the victim.

0101	Cortney Fisher	Seats (Total: 100)
	TuTh 5:00pm - 6:15pm	JMZ 0220

SG91	Louis Morlier	Seats (Total: 30)
	W 6:30pm - 9:00pm	BLD3 2225
<i>Restricted to CCJS students at Shady Grove.</i>		

CCJS370 Race, Crime and Criminal Justice

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DVUP

Prerequisite: CCJS100.

Role and treatment of racial/ethnic minorities in the criminal justice system. Course will provide students with historical and theoretical framework for understanding this dynamic.

0101	Christine White	Seats (Total: 60)
	MWF 12:00pm - 12:50pm	ESJ 2212

CCJS386 Experiential Learning

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail

Restriction: Permission of BSOS-Criminology & Criminal Justice department; and junior standing or higher.

Contact department for information to register for this course.

CCJS388H Independent Reading Course in Criminology and Criminal Justice

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Designed for the needs of honor students in criminology and criminal justice.

0101	Bianca Bersani	Seats (Total: 20)
	M 2:00pm - 4:30pm	SQH 1103

CCJS398 Law Enforcement Field Training

(Perm req)

Credits: 1-6 Grading Method: Regular, Pass-Fail, Audit

Supervised, structured and focused field training in law enforcement agencies.

Prerequisite: junior standing. For majors only.

Contact department for information to register for this course.

CCJS399 Independent Study in Criminology and Criminal Justice

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Integrated reading or research under direction and supervision of a faculty member.

Prerequisite: written consent of faculty under whose direction the study is to be performed, and at least twelve hours of CCJS credits.

Contact department for information to register for this course.

CCJS418D Seminar in Criminology and Criminal Justice; Evolving Legal Issues

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Selected topics of interest in the field of Criminology and Criminal Justice will be covered.

Prerequisite: CCJS100 and CCJS230.

0101	David Salem	Seats (Total: 50)
	W 6:00pm - 8:30pm	KEY 0103

CCJS418G Seminar in Criminology and Criminal Justice; Developing Fluency in Criminological Research

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Selected topics of interest in the field of Criminology and Criminal Justice will be covered.

Prerequisites: CCJS100, CCJS105, and CCJS300.

0101	Jean McGloin	Seats (Total: 15)
	Tu 2:00pm - 4:30pm	JMZ 3118

CCJS418M Seminar in Criminology and Criminal Justice; Cross National Comparisons of Crime and Criminal Justice

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Selected topics of interest in the field of Criminology and Criminal Justice will be covered.

SG91	Laszlo Korossy	Seats (Total: 40)
	W 9:30am - 12:00pm	BLD3 4220
<i>Restricted to CCJS students at Shady Grove.</i>		

CCJS418Q Seminar in Criminology and Criminal Justice; Crime and Place

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit*Selected topics of interest in the field of Criminology and Criminal Justice will be covered.*

Prerequisites: CCJS 100, CCJS 105, and CCJS 300

0101	Lauren Porter	Seats (Total: 50)
	TuTh 12:30pm - 1:45pm	SQH 1117
0201	Lauren Porter	Seats (Total: 50)
	TuTh 3:30pm - 4:45pm	TYD 1102

CCJS418R Seminar in Criminology and Criminal Justice; School Climate and School Safety

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit*Selected topics of interest in the field of Criminology and Criminal Justice will be covered.*

Prerequisites: CCJS100, CCJS105, and CCJS300.

0101	Deanna Devlin	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

CCJS440 Security AdministrationCredits: 3 Grading Method: Regular,
Pass-Fail, Audit*Prerequisite: CCJS100 and CCJS340. Credit only granted for: CCJS440 or CCJS498Z. Formerly: CCJS498Z.**Designed to introduce students to the complex issues of Security Administration and the critical terrorism issues facing the nation. Emphasis is placed on understanding the historical and contemporary issues effecting U.S. Counterterrorism Policy. It also explores the challenges facing today's security administrators including: ethics, classified information, intelligence, terrorist organizations and incidents, physical and personnel security, transportation and border security issues.*

SG91	Judith Philipson	Seats (Total: 30)
	M 9:30am - 12:00pm	BLD3 3206
	<i>Restricted to CCJS students at Shady Grove.</i>	

CCJS444 Advanced Law Enforcement Administration

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CCJS100 and CCJS340.

The structuring of manpower, material, and systems to accomplish the major goals of social control. Personnel and systems management. Political controls and limitations on authority and jurisdiction.

0101	Russell Hamill	Seats (Total: 50)
	M 5:00pm - 7:30pm	TYD 1118

CCJS450 Advanced Juvenile Delinquency

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CCJS105 and CCJS300. Credit only granted for: CCJS350 or CCJS450.

Examination of juvenile delinquency in the United States. Nature and extent of juvenile delinquency, historical approaches, sociological and criminological theories and research, social contexts including the institutions of families, schools, and peers, and social responses. Prevention, punishment, and treatment programs, both within and outside of the juvenile justice and criminal justice systems.

0101	Jessica Miller, Justine Madoo	Seats (Total: 50)
	TuTh 9:30am - 10:45am	LEF 2166
0301	Justine Madoo, Jessica Miller	Seats (Total: 50)
	TuTh 11:00am - 12:15pm	SQH 1119

CCJS451 Crime and Delinquency Prevention

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CCJS105 and CCJS300.

Methods and programs in prevention of crime and delinquency.

0101	Kyle Dorsey	Seats (Total: 50)
	TuTh 11:00am - 12:15pm	VMH 1207
SG91	Thomas Alexander	Seats (Total: 40)
	M 11:00am - 1:30pm	BLD3 2226
<i>Restricted to CCJS students at Shady Grove.</i>		

CCJS454 Contemporary Criminological Theory

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit*Prerequisite: CCJS300 and CCJS105.*

Examination of the main theoretical accounts that explain the underlying causes of criminal behaviors. Explore how individual choices, socialization experiences, biological factors and social structure affect criminal behaviors.

0101	Wade Jacobsen	Seats (Total: 50)
	MWF 10:00am - 10:50am	SQH 1117
0201	Maria Velez	Seats (Total: 50)
	MWF 1:00pm - 1:50pm	SQH 1117

CCJS461 Psychology of Criminal Behavior

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit*Prerequisite: CCJS105 and CCJS300.*

Biological, environmental, and personality factors which influence criminal behaviors. Biophysiology and crime, stress and crime, maladjustment patterns, psychoses, personality disorders, aggression and violent crime, sex-motivated crime and sexual deviations, alcohol and drug abuse, and criminal behavior.

SG91	Robin Shusko	Seats (Total: 35)
	M 9:30am - 10:45am	BLD3 2225
	Class time/details on ELMs	ONLINE
	<i>Restricted to CCJS students at Shady Grove.</i>	
SG92	Robin Shusko	Seats (Total: 5)
	M 9:30am - 10:45am	Location: TBA
	Class time/details on ELMs	ONLINE
	<i>Restricted to Public Health Science students at Shady Grove.</i>	

CCJS498B Selected Topics in Criminology and Criminal Justice; Elder Abuse

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology and criminal justice. Offered in response to student request and faculty interest.

SG91	Heidi Bresee	Seats (Total: 30)
	Tu 9:30am - 12:00pm	BLD3 3225
<i>Restricted to CCJS students at Shady Grove.</i>		

CCJS498I Selected Topics in Criminology and Criminal Justice; Digital Forensics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology and criminal justice. Offered in response to student request and faculty interest.

SG91	John Conroy	Seats (Total: 30)
	W 12:30pm - 3:00pm	BLD3 3206
<i>Restricted to CCJS students at Shady Grove.</i>		

CCJS498V Selected Topics in Criminology and Criminal Justice; Use of Force

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology and criminal justice. Offered in response to student request and faculty interest.

SG91	Shawn Eastman	Seats (Total: 40)
	Th 12:30pm - 3:00pm	BLD3 2225
<i>Restricted to CCJS students at Shady Grove.</i>		

CCJS498Z Selected Topics in Criminology and Criminal Justice; A Matter of Life and Death: Criminal Sentencing Issues

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest to advanced undergraduates in criminology and criminal justice. Offered in response to student request and faculty interest.

SG91	James Trusty, Debra Dwyer	Seats (Total: 30)
	Tu 6:30pm - 9:00pm	BLD3 2225
<i>Restricted to CCJS students at Shady Grove.</i>		

Criminal Justice

Current concept of criminal justice in relationship to other concepts in the field. Historical perspective. Criminal justice and social control. Operational implications. Systemic aspects. Issues of evaluation.

0101	Brian Johnson	Seats (Total: 20)
	W 4:00pm - 6:45pm	LEF 2165E

Policy Analysis Project

Contact department for information to register for this course.

Fundamentals of Criminological Research

Designed to help criminology students understand and apply three important components of statistics: descriptive statistics (including probability theory), fundamentals of statistical inference, and regression analysis. Course assumes familiarity with basic descriptive statistics. The emphasis of the classes on descriptive statistics is the calculation and interpretation of summary statistical measures for describing raw data. Covers the basic rules of probability and different probabilistic processes that could describe criminal activity. The sessions on fundamentals of statistical inferences are designed to provide background for executing and interpreting hypothesis tests and confidence intervals. The latter portion of the course focuses on regression analysis. Uses the statistical software, Stata.

0101	Sarah Tahamont	Seats (Total: 35)
	Tu 4:00pm - 6:45pm	LEF 2165E

Research Practicum

Credits: 3 Grading Method: Regular

Provides the opportunity for students to develop and complete a research project, which will provide information on research proficiency for the determination of advancement to doctoral candidacy

0101	Greg Midgette	Seats (Total: 20)
	Tu 4:00pm - 6:45pm	LEF 2207

CCJS654 History of Criminological Thought

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: CCJS454; or students who have taken courses with comparable content may contact the department. Formerly: CRIM654.

A study of the development of criminological thought from antiquity to the present.

0101	Wade Jacobsen	Seats (Total: 20)
	M 4:00pm - 6:45pm	LEF 2207

CCJS670 Race, Crime, and Criminal Justice

Credits: 3 Grading Method: Regular,
 Audit

Provides an historical overview of the operation and evolution of the criminal justice system and the impact of race. How race affects definitions of crime and criminality, the workings of the criminal justice system, the development of criminological theory, and the role of criminal justice ethics in the study of race and crime will be considered.

0101	Maria Velez	Seats (Total: 20)
	M 4:00pm - 6:45pm	LEF 2165E

CCJS699 Special Criminological Problems

Credits: 1-3 Grading Method: Regular,
 Audit

Supervised study of a selected problem in the field of criminal justice.

Contact department for information to register for this course.

CCJS699C Special Criminological Problems; Seminar on Victimization

Credits: 3 Grading Method: Regular,
 Audit

Supervised study of a selected problem in the field of criminal justice.

0101	Min Xie	Seats (Total: 20)
	Th 4:00pm - 6:45pm	LEF 2165E

CCJS710 Advanced Statistics Methods - Limited Dependent Variables

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have completed an approved doctoral level statistics course. Formerly: CRIM710.

Application of advanced data analysis strategies to criminological and criminal justice problems, with specific focus on limited dependent variables.

0101	Laura Dugan	Seats (Total: 15)
	Th 4:00pm - 6:45pm	JMZ 1224

CCJS720 Criminal Justice System Planning: Policy Analysis for Crime Control

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have completed 1 course in research methodology; and 1 course in CCJS. Formerly: CJUS720.

System theory and method; examination of planning methods and models based primarily on a systems approach to the operations of the criminal justice system.

0101	James Lynch	Seats (Total: 20)
	W 4:00pm - 6:45pm	LEF 2207

CCJS799 Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

CCJS898 Pre-Candidacy Research

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

CCJS899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Doctoral dissertation research in criminal justice and criminology.

Contact department for information to register for this course.

CHBE Chemical and Biomolecular Engineering

Fall 2019

CHBE100 Exploring ChBE

(Perm req)

Credits: 1 Grading Method: Regular

Prerequisite: Permission of instructor; and permission of ENGR-Chemical & Biomolecular Engineering department. Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department.

Overview of the specializations and career paths available in chemical and biomolecular engineering. Academic planning, policies and resources will be covered including introduction to undergraduate research, study abroad, internship and co-op opportunities as well as chemical engineering student groups. A peer mentoring program will enable students to interact with successful upper-class chemical engineering students and build their chemical engineering peer network.

0101	Ganesh Sriram, Deborah Goldberg	Seats (Total: 35)
	M 3:00pm - 3:50pm	IRB 1207

CHBE250 Computer Methods in Chemical Engineering

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: CHBE101; and must have completed or be concurrently enrolled in MATH241.

Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department.

Credit only granted for: CHBE250 or ENCH250. Formerly: ENCH250.

Algorithm development and application of software to the analysis of chemical engineering problems. File management and editing, graphics and numerical methods. Use of spreadsheets, statistics/math software and process simulators for the design of chemical process equipment.

0101	Nam Sun Wang	Seats (Total: 95)
	TuTh 12:30pm - 1:45pm	CHE 2110
	M 11:00am - 11:50am	CHE 2108 Discussion

CHBE301 Chemical and Biomolecular Engineering Thermodynamics I

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHBE101; and must have completed or be concurrently enrolled in CHBE250 and MATH241. Restriction: Must be in Engineering: Chemical program; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: ENCH300 or CHBE301. Formerly: ENCH300.

Principles of thermodynamics and their application to engineering problems. First and second laws of thermodynamics, properties of gases, liquids and solids, phase equilibrium, flow and non-flow systems, energy conversion, production of work from heat, thermodynamic analysis of processes, equilibrium stage operations and the thermodynamics of chemically reacting systems.

0101	Jeffery Klauda	Seats (Total: 95)	
	TuTh 2:00pm - 3:15pm	CHE 2110	
	W 11:00am - 11:50am	CHE 2108	Discussion

CHBE333 Chemical Engineering Seminar

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Junior standing; and must be in a major within ENGR-Chemical & Biomolecular Engineering department; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE333 or ENCH333. Formerly: ENCH333.

To develop oral communication skills through a series of class presentations of current chemical engineering topics.

0101	Deborah Goldberg	Seats (Total: 15)	
	W 12:00pm - 12:50pm	AJC 2119	
0103	Deborah Goldberg	Seats (Total: 15)	
	W 11:00am - 11:50am	AJC 2119	

CHBE369 Teaching Experiences in Chemical Engineering

Credits: 1-2 Grading Method: Regular,
Pass-Fail, Audit

Students will obtain pedagogical experience by assisting with the teaching of undergraduate courses in Chemical and Biomolecular Engineering.

Contact department for information to register for this course.

CHBE410 Statistics and Design of Experiments

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHBE250, MATH241, and MATH246. Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE410 or ENCH476. Formerly: ENCH476.

0101	Deborah Goldberg	Seats (Total: 100)	
	TuTh 2:00pm - 3:15pm	CHE 2108	
	F 11:00am - 11:50am	CHE 2110	Discussion

CHBE422

Chemical and Biomolecular Engineering Transport Phenomena I

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHBE101, CHBE250, MATH241, and MATH246. Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE422 or ENCH422. Formerly: ENCH422.

Principals of fluid dynamics as applied to model development and process design. Mass, momentum and energy conservation. Statics and surface tension. Equation of Continuity and Navier-Stokes Equation with application to laminar flow. Dimensional analysis. Macroscopic balances, Bernoulli Equation and friction factors with application to turbulent flow.

0101	Panagiotis Dimitrakopoulos	Seats (Total: 80)	
	TuTh 3:30pm - 4:45pm	CHE 2110	
	F 1:00pm - 1:50pm	CSI 3117	Discussion

CHBE437

Chemical and Biomolecular Engineering Laboratory

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHBE424, CHBE426, and CHBE440. Restriction: Must be in a major within ENGR-Chemical & Biomolecular Engineering department; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE437 or ENCH437. Formerly: ENCH437.

Application of chemical engineering process and unit operation principals in small-scale semi-commercial equipment. Data from experimental observations are used to evaluate performance and efficiency of operations. Emphasis on correct presentation of results in report form.

0101	Chen Zhang, Audaldo Ponce	Seats (Total: 24)	
	M 1:00pm - 5:00pm	CHE 1145	Lab
	M 10:00am - 10:50am	CHE 2136	Discussion
0201	Audaldo Ponce, Chen Zhang	Seats (Total: 24)	
	Tu 11:00am - 3:00pm	CHE 1145	Lab
	Tu 10:00am - 10:50am	CHE 2118	Discussion

0301	Audaldo Ponce, Chen Zhang	Seats (Total: 24)	
	Th 11:00am - 3:00pm	CHE 1145	Lab
	Th 10:00am - 10:50am	CHE 2118	Discussion
0401	Chen Zhang, Audaldo Ponce	Seats (Total: 24)	
	F 1:00pm - 5:00pm	CHE 1145	Lab
	F 10:00am - 10:50am	CHE 2108	Discussion

CHBE440

Chemical Kinetics and Reactor Design

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHBE301, MATH241, and MATH246. Restriction: Must be in Engineering: Chemical program; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE440 or ENCH440. Formerly: ENCH440.

Fundamentals of chemical reaction kinetics and their application to the design and operation of chemical reactors. Reaction rate theory, homogeneous reactions and catalysis electrochemical reactions. Catalytic reactor design.

0101	Srinivasa Raghavan	Seats (Total: 120)	
	MWF 2:00pm - 2:50pm	CHE 2110	
	M 1:00pm - 1:50pm	CHE 2110	Discussion

CHBE442

Chemical and Biomolecular Systems Analysis

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHBE424 and CHBE426. Credit only granted for: CHBE442 or ENCH442. Formerly: ENCH442.

Dynamic response applied to process systems. Goals and modes of control, Laplace transformations, analysis and synthesis of simple control systems, closed loop response, dynamic testing.

0101	Kyu Yong Choi	Seats (Total: 100)	
	MWF 12:00pm - 12:50pm	CHE 2108	
	W 4:00pm - 4:50pm	CHE 2108	Discussion

CHBE444

Process Engineering Economics and Design I

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHBE424, CHBE426, and CHBE440. Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE444 or ENCH444. Formerly: ENCH444.

Principles of chemical engineering economics and process design. Equipment sizing and costing. Economic evaluation of projects. Flowsheet synthesis. Introduction to flowsheet simulators and concepts of flowsheet optimization. Synthesis of Heat Exchanger Networks and Distillation Sequences.

0101	Ganesh Sriram	Seats (Total: 50)	
	TuTh 3:30pm - 4:45pm	ESJ 0202	
	W 11:00am - 11:50am	ESJ 0215	Discussion
0102	Ganesh Sriram	Seats (Total: 50)	
	TuTh 3:30pm - 4:45pm	ESJ 0202	
	W 2:00pm - 2:50pm	ESJ 0215	Discussion

CHBE451 Photovoltaics: Solar Energy

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: ENCH468L or CHBE451. Formerly: ENCH468L.

The emphasis of the class is on developing a conceptual understanding of the device physics and manufacturing processes of crystalline and thin-film photovoltaic cells, and to develop elementary computational skills necessary to quantify solar cell efficiency. The class material includes detailed, system-level energy balances necessary to understand how solar energy fits into the complete energy generation, conversion, and storage picture. Quantitative comparisons of PV technology to solar chemical conversion processes and biofuels are made.

0101	Raymond Adomaitis	Seats (Total: 15)	
	TuTh 2:00pm - 3:15pm	JMP 2216	

CHBE468 Research

(Perm req)

Credits: 1-3 Grading Method: Regular

Investigation of a research project under the direction of a faculty member. Comprehensive reports are required.

Contact department for information to register for this course.

CHBE469 Special Projects

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Special project under the direction of a faculty member. Comprehensive reports are required.

Contact department for information to register for this course.

CHBE470 The Science and Technology of Colloidal Systems

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHBE424, CHBE426, and CHEM482. Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department; and permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE470 or ENCH470. Formerly: ENCH470.

Introduction to colloidal systems. Preparation, stability and coagulation kinetics of colloidal suspensions. Introduction to DLVO theory, electrokinetic phenomena, rheology of dispersions, surface/interfacial tension, solute absorption at gas-liquid, liquid-liquid, liquid-solid and gas-solid interfaces and properties of micelles and other microstructures.

0101	Taylor Woehl	Seats (Total: 30)
	TuTh 5:00pm - 6:15pm	AJC 2119

CHBE472 Control of Air Pollution Sources

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of ENGR-Chemical & Biomolecular Engineering department.

Sources and effects of air pollutants, regulatory trends, atmospheric dispersion models, fundamentals of two-phase flow as applied to air pollution and air pollution control systems, design of systems for control of gases and particulate matter.

0101	Akua Asa-Awuku	Seats (Total: 20)
	MW 1:00pm - 2:15pm	CHM 1224

CHBE481 Transport Phenomena in Small and Biological Systems

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: ENCH468W or CHBE481. Formerly: ENCH468W.

Interdisciplinary course primarily for senior undergraduate and graduate students from engineering or science departments. The course's main goal is to make the students familiar with the fundamental physics and modeling of transport phenomena in small and biological systems, and their current scientific and engineering utilization in microfluidics, nanofluidics and biological systems.

0101	Panagiotis Dimitrakopoulos	Seats (Total: 20)
	MW 5:00pm - 6:15pm	CHE 2136

CHBE486 Heterogeneous Catalysis for Energy Applications

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHBE302, CHBE424, and CHBE440; and permission of instructor. Restriction: Must be in a major within the ENGR-Chemical & Biomolecular Engineering department. Credit only granted for: CHBE486 or ENCH686.

Introduction to heterogeneous catalytic science and technology for energy conversion and hydrocarbon processing. Preparation and mechanistic characterization of catalyst systems, kinetics of catalyzed reactions, adsorption and diffusion influences in heterogeneous reactions. An overview of heterogeneous catalysis in various energy-related applications, including petroleum refining, chemicals from biomass, valorization of shale gas, and CO₂ utilization will be introduced.

0101	Dongxia Liu	Seats (Total: 37)
	MW 5:00pm - 6:15pm	CHE 2110

CHBE497 Protein Engineering

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: BIOE120, CHBE302, and CHBE440; and permission of instructor. Credit only granted for: CHBE497, BIOE489R, or ENCH 648P.

This course will cover the fundamentals of protein engineering and its applications in medicine, chemical processes, and energy. Topics will include the structure and function of biological molecules, rational design and directed evolution, construction of protein and peptide libraries, protein screening platforms, methods for characterizing structure and function of biological molecules. Scientific literature will be used to highlight key discoveries and current work in protein engineering.

0101	Amy Karlsson	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	EGR 1104

The College of Computer, Mathematical and Natural Sciences enforces course prerequisites. Students who do not meet the course prerequisites will be administratively dropped from the course. Registration in course sections which begin with "SEF*" are restricted to students admitted into the Science in the Evening Program, administered through the Office of Extended Studies. For complete information, visit: OES website, email:oes@umd.edu, or call 301-405-7762.

CHEM131 Chemistry I - Fundamentals of General Chemistry

Credits: 3

Grading Method: Regular

General Education: DSNL (if taken with CHEM132)

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: CHEM132. Recommended: For Science majors. Credit only granted for: CHEM103, CHEM131, CHEM135, CHEM153 or CHEM146. Formerly: CHEM103.

An overview of the Periodic Table, inorganic substances, ionic and covalent bonding, bulk properties of materials, chemical equilibrium, and quantitative chemistry. CHEM131 is the first course in a four-semester sequence for students majoring in the sciences, other than Chemistry and Biochemistry majors.

Students without the math pre-requisite will be administratively dropped.

1221	Alice Mignerey MWF 10:00am - 10:50am Tu 8:00am - 8:50am	Seats (Total: 40) CHM 1407 CHM 2201	Discussion
1222	Alice Mignerey MWF 10:00am - 10:50am Tu 9:30am - 10:20am	Seats (Total: 40) CHM 1407 CHM 2201	Discussion
1224	Alice Mignerey MWF 10:00am - 10:50am Tu 11:00am - 11:50am	Seats (Total: 40) CHM 1407 CHM 2201	Discussion
1241	Alice Mignerey MWF 10:00am - 10:50am Th 8:00am - 8:50am	Seats (Total: 40) CHM 1407 CHM 2201	Discussion
1242	Alice Mignerey MWF 10:00am - 10:50am Th 9:30am - 10:20am	Seats (Total: 20) CHM 1407 CHM 2201	Discussion
1243	Alice Mignerey MWF 10:00am - 10:50am Th 11:00am - 11:50am	Seats (Total: 40) CHM 1407 CHM 2201	Discussion

1325	Monique Koppel MWF 11:00am - 11:50am Tu 12:30pm - 1:20pm	Seats (Total: 40) HJP 0226 CHM 2201	Discussion
1327	Monique Koppel MWF 11:00am - 11:50am Tu 2:00pm - 2:50pm	Seats (Total: 20) HJP 0226 CHM 2201	Discussion
1328	Monique Koppel MWF 11:00am - 11:50am Tu 3:30pm - 4:20pm	Seats (Total: 40) HJP 0226 CHM 2201	Discussion
1345	Monique Koppel MWF 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 40) HJP 0226 CHM 2201	Discussion
1347	Monique Koppel MWF 11:00am - 11:50am Th 2:00pm - 2:50pm	Seats (Total: 40) HJP 0226 CHM 2201	Discussion
1348	Monique Koppel MWF 11:00am - 11:50am Th 3:30pm - 4:20pm	Seats (Total: 40) HJP 0226 CHM 2201	Discussion
1425	Pedro Bueno MWF 8:00am - 8:50am Tu 12:30pm - 1:20pm	Seats (Total: 40) CHM 1407 CHM 0128	Discussion
1426	Pedro Bueno MWF 8:00am - 8:50am Tu 2:00pm - 2:50pm	Seats (Total: 40) CHM 1407 CHM 0128	Discussion
1427	Pedro Bueno MWF 8:00am - 8:50am Tu 3:30pm - 4:20pm	Seats (Total: 40) CHM 1407 CHM 0128	Discussion
1445	Pedro Bueno MWF 8:00am - 8:50am Th 12:30pm - 1:20pm	Seats (Total: 40) CHM 1407 CHM 0128	Discussion

1446	Pedro Bueno MWF 8:00am - 8:50am Th 2:00pm - 2:50pm	Seats (Total: 20) CHM 1407 CHM 0128	Discussion
1447	Pedro Bueno MWF 8:00am - 8:50am Th 3:30pm - 4:20pm	Seats (Total: 40) CHM 1407 CHM 0128	Discussion
1521	Amanda Schech MWF 1:00pm - 1:50pm Tu 8:00am - 8:50am	Seats (Total: 40) CHM 1407 CHM 0119	Discussion
1522	Amanda Schech MWF 1:00pm - 1:50pm Tu 9:30am - 10:20am	Seats (Total: 40) CHM 1407 CHM 0119	Discussion
1523	Amanda Schech MWF 1:00pm - 1:50pm Tu 11:00am - 11:50am	Seats (Total: 20) CHM 1407 CHM 0119	Discussion
1541	Amanda Schech MWF 1:00pm - 1:50pm Th 8:00am - 8:50am	Seats (Total: 40) CHM 1407 CHM 0119	Discussion
1542	Amanda Schech MWF 1:00pm - 1:50pm Th 9:30am - 10:20am	Seats (Total: 40) CHM 1407 CHM 0119	Discussion
1543	Amanda Schech MWF 1:00pm - 1:50pm Th 4:30pm - 5:20pm	Seats (Total: 40) CHM 1407 CHM 0119	Discussion
FC01	Pedro Bueno TuTh 4:30pm - 5:45pm F 11:00am - 11:50am <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 41) CHM 1407 CHM 2201	Discussion
FC02	Pedro Bueno TuTh 4:30pm - 5:45pm F 12:00pm - 12:50pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 41) CHM 1407 CHM 2201	Discussion

FC03	Pedro Bueno	Seats (Total: 41)	
	TuTh 4:30pm - 5:45pm	CHM 1407	
	F 3:00pm - 3:50pm	CHM 2201	Discussion
<i>Restricted to students in Freshmen Connection.</i>			
SEF1	Robert Richman	Seats (Total: 38)	
	M 6:30pm - 9:30pm	CHM 0119	
	W 6:30pm - 7:20pm	CHM 0119	Discussion
<i>Restricted to students in the SIE Program. Click here for more information.</i>			

CHEM131S Chemistry I - Fundamentals of General Chemistry

Credits: 3

Grading Method: Regular

General Education: DSNL (if taken with CHEM132)

Prerequisite: Must have math eligibility of MATH120 or higher. Corequisite: CHEM132. Recommended: For Science majors. Credit only granted for: CHEM103, CHEM131, CHEM135, CHEM153 or CHEM146. Formerly: CHEM103.

An overview of the Periodic Table, inorganic substances, ionic and covalent bonding, bulk properties of materials, chemical equilibrium, and quantitative chemistry. CHEM131 is the first course in a four-semester sequence for students majoring in the sciences, other than Chemistry and Biochemistry majors.

Restricted to College Park Scholars - Life Sciences. Students without the math pre-requisite will be administratively dropped.

1242	Alice Mignerey	Seats (Total: 20)	
	MWF 10:00am - 10:50am	CHM 1407	
	Th 9:30am - 10:20am	CHM 2201	Discussion
1327	Monique Koppel	Seats (Total: 20)	
	MWF 11:00am - 11:50am	HJP 0226	
	Tu 2:00pm - 2:50pm	CHM 2201	Discussion
1446	Pedro Bueno	Seats (Total: 20)	
	MWF 8:00am - 8:50am	CHM 1407	
	Th 2:00pm - 2:50pm	CHM 0128	Discussion
1523	Amanda Schech	Seats (Total: 20)	
	MWF 1:00pm - 1:50pm	CHM 1407	
	Tu 11:00am - 11:50am	CHM 0119	Discussion

CHEM132**General Chemistry I Laboratory**

Credits: 1 Grading Method: Regular

Corequisite: CHEM131. Credit only granted for: CHEM103, CHEM132, CHEM136, CHEM143, CHEM147 or CHEM177. Formerly: CHEM103.

Introduction to the quantification of chemical substances, including the concept of the mole and chemical stoichiometry. Additional work involves the synthesis of ionic substances and their qualitative characterization. Must be taken concurrently with CHEM131.

Laboratory sessions will begin after the first lecture. Students must pay a \$40.00 laboratory materials fee.

1111	Christiana Guest M 9:00am - 11:50am	Seats (Total: 24) ESJ 1312	Lab
1122	Christiana Guest M 12:00pm - 2:50pm	Seats (Total: 24) ESJ 1316	Lab
1131	Christiana Guest M 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1312	Lab
1132	Christiana Guest M 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1316	Lab
1211	Christiana Guest Tu 9:30am - 12:20pm	Seats (Total: 24) ESJ 1312	Lab
1221	Christiana Guest Tu 12:30pm - 3:20pm	Seats (Total: 24) ESJ 1312	Lab
1222	Christiana Guest Tu 12:30pm - 3:20pm	Seats (Total: 24) ESJ 1316	Lab
1223	Christiana Guest Tu 12:30pm - 3:20pm	Seats (Total: 24) ESJ 2324	Lab
1232	Christiana Guest Tu 3:30pm - 6:20pm	Seats (Total: 24) ESJ 1316	Lab
1311	Christiana Guest W 9:00am - 11:50am	Seats (Total: 24) ESJ 1312	Lab

1321	Christiana Guest W 12:00pm - 2:50pm	Seats (Total: 24) ESJ 1312	Lab
1331	Christiana Guest W 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1312	Lab
1332	Christiana Guest W 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1316	Lab
1333	Christiana Guest W 3:00pm - 5:50pm	Seats (Total: 24) ESJ 2324	Lab
1334	Christiana Guest W 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1330	Lab
1411	Christiana Guest Th 9:30am - 12:20pm	Seats (Total: 24) ESJ 1312	Lab
1412	Christiana Guest Th 9:30am - 12:20pm	Seats (Total: 24) ESJ 1316	Lab
1413	Christiana Guest Th 9:30am - 12:20pm	Seats (Total: 24) ESJ 2324	Lab
1422	Christiana Guest Th 12:30pm - 3:20pm	Seats (Total: 24) ESJ 1316	Lab
1432	Christiana Guest Th 3:30pm - 6:20pm	Seats (Total: 24) ESJ 1316	Lab
1511	Christiana Guest F 9:00am - 11:50am	Seats (Total: 24) ESJ 1312	Lab
1531	Christiana Guest F 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1312	Lab
1532	Christiana Guest F 3:00pm - 5:50pm	Seats (Total: 24) ESJ 1316	Lab

FC11	Christiana Guest F 9:00am - 11:50am <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 22) ESJ 1316 Lab
FC12	Christiana Guest F 9:00am - 11:50am <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 22) ESJ 2324 Lab
FC13	Christiana Guest F 9:00am - 11:50am <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 22) ESJ 1330 Lab
FC21	Christiana Guest F 12:00pm - 2:50pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 22) ESJ 1316 Lab
FC22	Christiana Guest F 12:00pm - 2:50pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 22) ESJ 2324 Lab
FC23	Christiana Guest F 12:00pm - 2:50pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 22) ESJ 1330 Lab
FC33	Christiana Guest F 3:00pm - 5:50pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 22) ESJ 1330 Lab
SEF1	Christiana Guest W 7:30pm - 10:30pm <i>Restricted to students in the SIE Program. Click here for more information.</i>	Seats (Total: 24) ESJ 1330 Lab
SEF2	Christiana Guest W 7:30pm - 10:30pm <i>Restricted to students in the SIE Program. Click here for more information.</i>	Seats (Total: 24) ESJ 1316 Lab

CHEM132C

General Chemistry I Laboratory

Credits: 1

Grading Method: Regular,
Pass-Fail

Corequisite: CHEM131. Credit only granted for: CHEM103, CHEM132, CHEM136, CHEM143, CHEM147 or CHEM177. Formerly: CHEM103.

Introduction to the quantification of chemical substances, including the concept of the mole and chemical stoichiometry. Additional work involves the synthesis of ionic substances and their qualitative characterization. Must be taken concurrently with CHEM131.

Restricted to new freshmen and new transfer students in Biological Science, Chemistry or Biochemistry. Students must pay a \$40.00 laboratory materials fee.

1121	Christiana Guest M 12:00pm - 2:50pm	Seats (Total: 24) ESJ 1312	Lab
1123	Christiana Guest M 12:00pm - 2:50pm	Seats (Total: 24) ESJ 2324	Lab
1133	Christiana Guest M 3:00pm - 5:50pm	Seats (Total: 24) ESJ 2324	Lab
1213	Christiana Guest Tu 9:30am - 12:20pm	Seats (Total: 24) ESJ 2324	Lab
1231	Christiana Guest Tu 3:30pm - 6:20pm	Seats (Total: 24) ESJ 1312	Lab
1323	Christiana Guest W 12:00pm - 2:50pm	Seats (Total: 24) ESJ 2324	Lab
1421	Christiana Guest Th 12:30pm - 3:20pm	Seats (Total: 24) ESJ 1312	Lab
1423	Christiana Guest Th 12:30pm - 3:20pm	Seats (Total: 24) ESJ 2324	Lab
1433	Christiana Guest Th 3:30pm - 6:20pm <i>Restricted to BioFire students.</i>	Seats (Total: 24) ESJ 1324	Lab
1521	Christiana Guest F 12:00pm - 2:50pm <i>Restricted to BioFire students.</i>	Seats (Total: 24) ESJ 1312	Lab

CHEM132S General Chemistry I Laboratory

Credits: 1 Grading Method: Regular

Corequisite: CHEM131. Credit only granted for: CHEM103, CHEM132, CHEM136, CHEM143, CHEM147 or CHEM177. Formerly: CHEM103.

Introduction to the quantification of chemical substances, including the concept of the mole and chemical stoichiometry. Additional work involves the synthesis of ionic substances and their qualitative characterization. Must be taken concurrently with CHEM131.

Restricted to College Park - Life Sciences. Laboratory sessions will begin after the first lecture. Students must pay a \$40.00 laboratory materials fee.

1212	Christiana Guest	Seats (Total: 24)	
	Tu 9:30am - 12:20pm	ESJ 1316	Lab
1233	Christiana Guest	Seats (Total: 24)	
	Tu 3:30pm - 6:20pm	ESJ 2324	Lab
1322	Christiana Guest	Seats (Total: 24)	
	W 12:00pm - 2:50pm	ESJ 1316	Lab
1431	Christiana Guest	Seats (Total: 24)	
	Th 3:30pm - 6:20pm	ESJ 1312	Lab

CHEM134 Chemical Principles for Engineering

Credits: 1 Grading Method: Regular

Prerequisite: Minimum grade of C- in CHEM131; or minimum grade of C- in CHEM146. Credit only granted for: CHEM 134 or CHEM 135.

Basic chemistry for engineering students. Introduction to organic structures and polymers, gas laws, liquids, solids, phase changes, chemical kinetics and electrochemistry.

0101	Earle Stone	Seats (Total: 160)	
	Tu 8:00am - 8:50am	ESJ 2208	

CHEM135 General Chemistry for Engineers

Credits: 3 Grading Method: Regular

Prerequisite: Must have math eligibility of MATH120 or higher. Credit only granted for: CHEM103, CHEM113, CHEM131, CHEM135, or CHEM146.

The nature and composition of matter, solutions, chemical reactions, equilibria, and electrochemistry, with applications to various fields of engineering.

3125	Elizabeth Griffith TuTh 11:00am - 12:15pm M 12:00pm - 12:50pm	Seats (Total: 36) CHM 1407 CHM 2201	Discussion
3126	Elizabeth Griffith TuTh 11:00am - 12:15pm M 1:00pm - 1:50pm	Seats (Total: 36) CHM 1407 CHM 2201	Discussion
3127	Elizabeth Griffith TuTh 11:00am - 12:15pm M 2:00pm - 2:50pm	Seats (Total: 36) CHM 1407 CHM 2201	Discussion
3145	Elizabeth Griffith TuTh 11:00am - 12:15pm W 12:00pm - 12:50pm	Seats (Total: 36) CHM 1407 CHM 2201	Discussion
3147	Elizabeth Griffith TuTh 11:00am - 12:15pm W 1:00pm - 1:50pm	Seats (Total: 36) CHM 1407 CHM 2201	Discussion
3148	Elizabeth Griffith TuTh 11:00am - 12:15pm W 2:00pm - 2:50pm	Seats (Total: 36) CHM 1407 CHM 2201	Discussion
3225	Matthew Thum MWF 2:00pm - 2:50pm Tu 8:00am - 8:50am	Seats (Total: 36) BRB 1101 CHM 0128	Discussion
3226	Matthew Thum MWF 2:00pm - 2:50pm Tu 9:30am - 10:20am	Seats (Total: 36) BRB 1101 CHM 0128	Discussion
3227	Matthew Thum MWF 2:00pm - 2:50pm Tu 11:00am - 11:50am	Seats (Total: 36) BRB 1101 CHM 0128	Discussion
3245	Matthew Thum MWF 2:00pm - 2:50pm Th 8:00am - 8:50am	Seats (Total: 36) BRB 1101 CHM 0128	Discussion

3247	Matthew Thum MWF 2:00pm - 2:50pm Th 9:30am - 10:20am	Seats (Total: 36) BRB 1101 CHM 0128	Discussion
3248	Matthew Thum MWF 2:00pm - 2:50pm Th 11:00am - 11:50am	Seats (Total: 36) BRB 1101 CHM 0128	Discussion
3425	Matthew Thum TuTh 12:30pm - 1:45pm M 12:00pm - 12:50pm	Seats (Total: 36) BRB 1101 CHM 0119	Discussion
3426	Matthew Thum TuTh 12:30pm - 1:45pm M 1:00pm - 1:50pm	Seats (Total: 36) BRB 1101 CHM 0119	Discussion
3427	Matthew Thum TuTh 12:30pm - 1:45pm M 2:00pm - 2:50pm	Seats (Total: 36) BRB 1101 CHM 0119	Discussion
3445	Matthew Thum TuTh 12:30pm - 1:45pm W 12:00pm - 12:50pm	Seats (Total: 36) BRB 1101 CHM 0119	Discussion
3446	Matthew Thum TuTh 12:30pm - 1:45pm W 1:00pm - 1:50pm	Seats (Total: 36) BRB 1101 CHM 0119	Discussion
3447	Matthew Thum TuTh 12:30pm - 1:45pm W 2:00pm - 2:50pm	Seats (Total: 36) BRB 1101 CHM 0119	Discussion
FC01	Natalia White TuTh 4:30pm - 5:45pm F 11:00am - 11:50am <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 41) CHM 1402 CHM 0115	Discussion
FC02	Natalia White TuTh 4:30pm - 5:45pm F 12:00pm - 12:50pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 32) CHM 1402 CHM 0115	Discussion

FC03	Natalia White	Seats (Total: 28)	
	TuTh 4:30pm - 5:45pm	CHM 1402	
	F 1:00pm - 1:50pm	CHM 0115	Discussion
<i>Restricted to students in Freshmen Connection.</i>			

CHEM136 General Chemistry Laboratory for Engineers

Credits: 1 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in CHEM135. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering.

A laboratory course for engineering majors intending to take CHEM231 and CHEM232.

There is a \$40.00 lab fee for this course.

1125	Natalia White	Seats (Total: 24)	
	M 12:00pm - 2:50pm	ESJ 1330	Lab
1135	Natalia White	Seats (Total: 24)	
	M 3:00pm - 5:50pm	ESJ 1330	Lab
1215	Natalia White	Seats (Total: 24)	
	Tu 9:30am - 12:20pm	ESJ 1330	Lab
1225	Natalia White	Seats (Total: 24)	
	Tu 12:30pm - 3:20pm	ESJ 1330	Lab

CHEM146 Principles of General Chemistry

Credits: 3 Grading Method: Regular

Prerequisite: Must have math eligibility of MATH140 or higher. Corequisite: CHEM177. Restriction: Must be in one of the following programs (Chemistry; Biochemistry). Credit only granted for: CHEM103, CHEM131, CHEM135, CHEM143, or CHEM146. Formerly: CHEM143.

An overview of the Periodic Table, inorganic substances, ionic and covalent bonding, bulk properties of materials, chemical equilibrium, and quantitative chemistry. CHEM146 is the first course in a four-semester sequence for Chemistry and Biochemistry majors.

0032	Andrei Vedernikov	Seats (Total: 40)	
	MWF 9:00am - 9:50am	PLS 1140	
	Tu 9:30am - 10:20am	CHM 1109	Discussion

0033	Andrei Vedernikov	Seats (Total: 40)	
	MWF 9:00am - 9:50am	PLS 1140	
	Th 9:30am - 10:20am	CHM 1109	Discussion

CHEM177 Introduction to Laboratory Practices and Research in the Chemical Sciences

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Corequisite: CHEM146, CHEM131, or CHEM135. Restriction: Must be in a major within CMNS-Chemistry & Biochemistry department; or permission of CMNS-Chemistry & Biochemistry department. Credit only granted for: CHEM132, CHEM136, CHEM147, or CHEM177.

First semester laboratory course required for CHEM and BCHM majors. Introduction to laboratory techniques, including safety practices, scientific ethics, and presentation of current research topics.

Students must pay a \$40.00 laboratory materials fee.

1131	Elizabeth Griffith	Seats (Total: 18)	
	F 3:00pm - 3:50pm	ESJ 1202	
	M 3:00pm - 5:50pm	ESJ 0312	Lab
1211	Elizabeth Griffith	Seats (Total: 18)	
	F 3:00pm - 3:50pm	ESJ 1202	
	Tu 9:30am - 12:20pm	ESJ 0312	Lab
1231	Elizabeth Griffith	Seats (Total: 18)	
	F 3:00pm - 3:50pm	ESJ 1202	
	Tu 3:30pm - 6:20pm	ESJ 0312	Lab
1331	Elizabeth Griffith	Seats (Total: 18)	
	F 3:00pm - 3:50pm	ESJ 1202	
	W 3:00pm - 5:50pm	ESJ 0312	Lab
1411	Elizabeth Griffith	Seats (Total: 18)	
	F 3:00pm - 3:50pm	ESJ 1202	
	Th 9:30am - 12:20pm	ESJ 0312	Lab
1431	Elizabeth Griffith	Seats (Total: 18)	
	F 3:00pm - 3:50pm	ESJ 1202	
	Th 3:30pm - 6:20pm	ESJ 0312	Lab

1521	Elizabeth Griffith	Seats (Total: 18)	
	F 3:00pm - 3:50pm	ESJ 1202	
	F 12:00pm - 2:50pm	ESJ 0312	Lab

CHEM231 Organic Chemistry I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHEM131, CHEM135, or CHEM146; and (CHEM132, CHEM136, CHEM147, or CHEM177); and a grade of C- or better in the prerequisites is required of College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: CHEM232. Credit only granted for: CHEM104, CHEM231, CHEM233 or CHEM237. Formerly: CHEM233.

The chemistry of carbon: aliphatic compounds, aromatic compounds, stereochemistry, arenes, halides, alcohols, esters and spectroscopy.

5125	Lee Friedman	Seats (Total: 34)	
	MWF 9:00am - 9:50am	CHM 1407	
	Tu 12:30pm - 1:20pm	CHM 0115	Discussion
5127	Lee Friedman	Seats (Total: 34)	
	MWF 9:00am - 9:50am	CHM 1407	
	Tu 2:00pm - 2:50pm	CHM 0115	Discussion
5128	Lee Friedman	Seats (Total: 34)	
	MWF 9:00am - 9:50am	CHM 1407	
	Tu 3:30pm - 4:20pm	CHM 0115	Discussion
5145	Lee Friedman	Seats (Total: 34)	
	MWF 9:00am - 9:50am	CHM 1407	
	Th 12:30pm - 1:20pm	CHM 0115	Discussion
5147	Lee Friedman	Seats (Total: 34)	
	MWF 9:00am - 9:50am	CHM 1407	
	Th 2:00pm - 2:50pm	CHM 0115	Discussion
5148	Lee Friedman	Seats (Total: 34)	
	MWF 9:00am - 9:50am	CHM 1407	
	Th 3:30pm - 4:20pm	CHM 0115	Discussion

5215	Osvaldo Gutierrez MWF 12:00pm - 12:50pm Tu 12:30pm - 1:20pm	Seats (Total: 34) CHM 1407 CHM 1109	Discussion
5216	Osvaldo Gutierrez MWF 12:00pm - 12:50pm Tu 2:00pm - 2:50pm	Seats (Total: 34) CHM 1407 CHM 1109	Discussion
5217	Osvaldo Gutierrez MWF 12:00pm - 12:50pm Tu 3:30pm - 4:20pm	Seats (Total: 34) CHM 1407 CHM 1109	Discussion
5235	Osvaldo Gutierrez MWF 12:00pm - 12:50pm Th 12:30pm - 1:20pm	Seats (Total: 34) CHM 1407 CHM 1109	Discussion
5236	Osvaldo Gutierrez MWF 12:00pm - 12:50pm Th 2:00pm - 2:50pm	Seats (Total: 34) CHM 1407 CHM 1109	Discussion
5237	Osvaldo Gutierrez MWF 12:00pm - 12:50pm Th 3:30pm - 4:20pm	Seats (Total: 34) CHM 1407 CHM 1109	Discussion
5315	Bonnie Dixon TuTh 2:00pm - 3:15pm M 12:00pm - 12:50pm	Seats (Total: 34) CHM 1407 CHM 0122	Discussion
5316	Bonnie Dixon TuTh 2:00pm - 3:15pm M 1:00pm - 1:50pm	Seats (Total: 34) CHM 1407 CHM 0122	Discussion
5317	Bonnie Dixon TuTh 2:00pm - 3:15pm M 2:00pm - 2:50pm	Seats (Total: 34) CHM 1407 CHM 0122	Discussion
5335	Bonnie Dixon TuTh 2:00pm - 3:15pm W 12:00pm - 12:50pm	Seats (Total: 34) CHM 1407 CHM 0122	Discussion

5336	Bonnie Dixon TuTh 2:00pm - 3:15pm W 1:00pm - 1:50pm	Seats (Total: 34) CHM 1407 CHM 0122	Discussion
5337	Bonnie Dixon TuTh 2:00pm - 3:15pm W 2:00pm - 2:50pm	Seats (Total: 34) CHM 1407 CHM 0122	Discussion
5421	Lenea Stocker MWF 2:00pm - 2:50pm Tu 8:00am - 8:50am	Seats (Total: 34) CHM 1407 CHM 0115	Discussion
5422	Lenea Stocker MWF 2:00pm - 2:50pm Tu 9:30am - 10:20am	Seats (Total: 34) CHM 1407 CHM 0115	Discussion
5423	Lenea Stocker MWF 2:00pm - 2:50pm Tu 11:00am - 11:50am	Seats (Total: 34) CHM 1407 CHM 0115	Discussion
5441	Lenea Stocker MWF 2:00pm - 2:50pm Th 8:00am - 8:50am	Seats (Total: 34) CHM 1407 CHM 0115	Discussion
5442	Lenea Stocker MWF 2:00pm - 2:50pm Th 9:30am - 10:20am	Seats (Total: 34) CHM 1407 CHM 0115	Discussion
5443	Lenea Stocker MWF 2:00pm - 2:50pm Th 4:30pm - 5:45pm	Seats (Total: 34) CHM 1407 CHM 0115	Discussion
SEF1	Monique Koppel M 6:30pm - 9:30pm W 6:30pm - 7:20pm <i>Restricted to students in the SIE Program. Click here for more information.</i>	Seats (Total: 36) CHM 1402 CHM 0115	Discussion

Prerequisite: CHEM131 and CHEM132; or (CHEM135 and CHEM136); or (CHEM146 and CHEM147). And a grade of C- or better in the prerequisites is required for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: CHEM231. Credit only granted for: CHEM104, CHEM231, CHEM233 or CHEM237. Formerly: CHEM233.

Provides experience in developing some basic laboratory techniques, recrystallization, distillation, extraction, chromatography.

Laboratory sessions will begin after the first lecture of CHEM 231. Students must pay a \$40.00 laboratory materials fee.

5121	Monique Koppel M 12:00pm - 2:50pm	Seats (Total: 18) CHM 1342	Lab
5122	Monique Koppel M 12:00pm - 2:50pm	Seats (Total: 18) CHM 1346	Lab
5123	Monique Koppel M 12:00pm - 2:50pm	Seats (Total: 18) CHM 1356	Lab
5131	Monique Koppel M 3:00pm - 5:50pm	Seats (Total: 18) CHM 1342	Lab
5132	Monique Koppel M 3:00pm - 5:50pm	Seats (Total: 18) CHM 1346	Lab
5133	Monique Koppel M 3:00pm - 5:50pm	Seats (Total: 18) CHM 1356	Lab
5141	Monique Koppel M 6:00pm - 8:50pm	Seats (Total: 18) CHM 1342	Lab
5142	Monique Koppel M 6:00pm - 8:50pm	Seats (Total: 18) CHM 1346	Lab
5143	Monique Koppel M 6:00pm - 8:50pm	Seats (Total: 18) CHM 1356	Lab
5221	Monique Koppel Tu 12:30pm - 3:20pm	Seats (Total: 18) CHM 1342	Lab
5222	Monique Koppel Tu 12:30pm - 3:20pm	Seats (Total: 18) CHM 1346	Lab

5223	Monique Koppel Tu 12:30pm - 3:20pm	Seats (Total: 18) CHM 1356	Lab
5224	Monique Koppel Tu 12:30pm - 3:20pm	Seats (Total: 18) CHM 1360	Lab
5231	Monique Koppel Tu 3:30pm - 6:20pm	Seats (Total: 18) CHM 1342	Lab
5232	Monique Koppel Tu 3:30pm - 6:20pm	Seats (Total: 18) CHM 1346	Lab
5233	Monique Koppel Tu 3:30pm - 6:20pm	Seats (Total: 18) CHM 1356	Lab
5234	Monique Koppel Tu 3:30pm - 6:20pm	Seats (Total: 18) CHM 1360	Lab
5241	Monique Koppel Tu 6:30pm - 9:20pm	Seats (Total: 18) CHM 1342	Lab
5242	Monique Koppel Tu 6:30pm - 9:20pm	Seats (Total: 18) CHM 1346	Lab
5243	Monique Koppel Tu 6:30pm - 9:20pm	Seats (Total: 18) CHM 1356	Lab
5321	Monique Koppel W 12:00pm - 2:50pm	Seats (Total: 18) CHM 1342	Lab
5322	Monique Koppel W 12:00pm - 2:50pm	Seats (Total: 18) CHM 1346	Lab
5323	Monique Koppel W 12:00pm - 2:50pm	Seats (Total: 18) CHM 1356	Lab
5324	Monique Koppel W 12:00pm - 2:50pm	Seats (Total: 18) CHM 1360	Lab
5331	Monique Koppel W 3:00pm - 5:50pm	Seats (Total: 18) CHM 1342	Lab

5332	Monique Koppel W 3:00pm - 5:50pm	Seats (Total: 18) CHM 1346	Lab
5333	Monique Koppel W 3:00pm - 5:50pm	Seats (Total: 18) CHM 1356	Lab
5341	Monique Koppel W 6:00pm - 8:50pm	Seats (Total: 18) CHM 1342	Lab
5343	Monique Koppel W 6:00pm - 8:50pm	Seats (Total: 18) CHM 1356	Lab
5421	Monique Koppel Th 12:30pm - 3:20pm	Seats (Total: 18) CHM 1342	Lab
5422	Monique Koppel Th 12:30pm - 3:20pm	Seats (Total: 18) CHM 1346	Lab
5423	Monique Koppel Th 12:30pm - 3:20pm	Seats (Total: 18) CHM 1356	Lab
5424	Monique Koppel Th 12:30pm - 3:20pm	Seats (Total: 18) CHM 1360	Lab
5431	Monique Koppel Th 3:30pm - 6:20pm	Seats (Total: 18) CHM 1342	Lab
5432	Monique Koppel Th 3:30pm - 6:20pm	Seats (Total: 18) CHM 1346	Lab
5433	Monique Koppel Th 3:30pm - 6:20pm	Seats (Total: 18) CHM 1356	Lab
5434	Monique Koppel Th 3:30pm - 6:20pm	Seats (Total: 18) CHM 1360	Lab
SEF1	Monique Koppel W 7:30pm - 10:30pm	Seats (Total: 18) CHM 1346	Lab
<i>Restricted to students in the SIE Program. Click here for more information.</i>			

SEF2	Monique Koppel	Seats (Total: 18)	
	W 7:30pm - 10:20pm	CHM 1360	Lab
<i>Restricted to students in the SIE Program. Click here for more information.</i>			

CHEM241

Organic Chemistry II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHEM231 and CHEM232; or CHEM237. And a grade of C- or better in the prerequisites is required for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Credit only granted for: CHEM241, CHEM243 or CHEM247. Formerly: CHEM243.

A continuation of CHEM231 with emphasis on molecular structure; substitution reactions; carbonium ions; aromaticity; synthetic processes; macromolecules.

6115	Michael Montague-Smith	Seats (Total: 37)	
	TuTh 8:00am - 9:15am	CHM 1407	
	M 12:00pm - 12:50pm	CHM 1109	Discussion
6116	Michael Montague-Smith	Seats (Total: 37)	
	TuTh 8:00am - 9:15am	CHM 1407	
	M 1:00pm - 1:50pm	CHM 1109	Discussion
6117	Michael Montague-Smith	Seats (Total: 37)	
	TuTh 8:00am - 9:15am	CHM 1407	
	M 2:00pm - 2:50pm	CHM 1109	Discussion
6135	Michael Montague-Smith	Seats (Total: 37)	
	TuTh 8:00am - 9:15am	CHM 1407	
	W 12:00pm - 12:50pm	CHM 1109	Discussion
6136	Michael Montague-Smith	Seats (Total: 37)	
	TuTh 8:00am - 9:15am	CHM 1407	
	W 1:00pm - 1:50pm	CHM 1109	Discussion
6137	Michael Montague-Smith	Seats (Total: 37)	
	TuTh 8:00am - 9:15am	CHM 1407	
	W 2:00pm - 2:50pm	CHM 1109	Discussion
6212	Lai-Xi Wang	Seats (Total: 37)	
	TuTh 9:30am - 10:45am	CHM 1407	
	M 9:00am - 9:50am	CHM 1109	Discussion

6213	Lai-Xi Wang TuTh 9:30am - 10:45am M 10:00am - 10:50am	Seats (Total: 37) CHM 1407 CHM 1109	Discussion
6214	Lai-Xi Wang TuTh 9:30am - 10:45am M 11:00am - 11:50am	Seats (Total: 37) CHM 1407 CHM 1109	Discussion
6232	Lai-Xi Wang TuTh 9:30am - 10:45am W 9:00am - 9:50am	Seats (Total: 37) CHM 1407 CHM 1109	Discussion
6233	Lai-Xi Wang TuTh 9:30am - 10:45am W 10:00am - 10:50am	Seats (Total: 37) CHM 1407 CHM 1109	Discussion
6234	Lai-Xi Wang TuTh 9:30am - 10:45am W 11:00am - 11:50am	Seats (Total: 37) CHM 1407 CHM 1109	Discussion
6415	Lenea Stocker TuTh 12:30pm - 1:45pm M 12:00pm - 12:50pm	Seats (Total: 37) CHM 1407 CHM 0115	Discussion
6416	Lenea Stocker TuTh 12:30pm - 1:45pm M 1:00pm - 1:50pm	Seats (Total: 37) CHM 1407 CHM 0115	Discussion
6417	Lenea Stocker TuTh 12:30pm - 1:45pm M 2:00pm - 2:50pm	Seats (Total: 37) CHM 1407 CHM 0115	Discussion
6435	Lenea Stocker TuTh 12:30pm - 1:45pm W 12:00pm - 12:50pm	Seats (Total: 37) CHM 1407 CHM 0115	Discussion
6436	Lenea Stocker TuTh 12:30pm - 1:45pm W 1:00pm - 1:50pm	Seats (Total: 37) CHM 1407 CHM 0115	Discussion

6437	Lenea Stocker	Seats (Total: 37)	
	TuTh 12:30pm - 1:45pm	CHM 1407	
	W 2:00pm - 2:50pm	CHM 0115	Discussion
SEF1	Howard Fribush	Seats (Total: 24)	
	M 6:30pm - 9:30pm	PLS 1140	
	W 6:30pm - 7:20pm	CHM 0127	Discussion
<i>Restricted to students in the SIE Program. Click here for more information.</i>			

CHEM242

Organic Chemistry Laboratory II

Credits: 1 Grading Method: Regular

Prerequisite: CHEM231 and CHEM232; or CHEM237. And a grade of C- or better in the prerequisites is required for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: CHEM241. Credit only granted for: CHEM243 or CHEM247. Formerly: CHEM243.

Synthetic organic chemistry through functional group manipulation, introduction to instrumentation essential to analysis and structure elucidation.

Students must pay a \$40.00 laboratory materials fee.

6121	Lee Friedman	Seats (Total: 18)	
	M 12:00pm - 2:50pm	CHM 1302	Lab
6122	Lee Friedman	Seats (Total: 18)	
	M 12:00pm - 2:50pm	CHM 1308	Lab
6123	Lee Friedman	Seats (Total: 18)	
	M 12:00pm - 2:50pm	CHM 1326	Lab
6131	Lee Friedman	Seats (Total: 18)	
	M 3:00pm - 5:50pm	CHM 1302	Lab
6132	Lee Friedman	Seats (Total: 18)	
	M 3:00pm - 5:50pm	CHM 1308	Lab
6141	Lee Friedman	Seats (Total: 18)	
	M 6:00pm - 8:50pm	CHM 1302	Lab
6142	Lee Friedman	Seats (Total: 18)	
	M 6:00pm - 8:50pm	CHM 1308	Lab

6144	Lee Friedman M 6:00pm - 8:50pm	Seats (Total: 18) CHM 1330	Lab
6221	Lee Friedman Tu 12:30pm - 3:20pm	Seats (Total: 18) CHM 1302	Lab
6222	Lee Friedman Tu 12:30pm - 3:20pm	Seats (Total: 18) CHM 1308	Lab
6224	Lee Friedman Tu 12:30pm - 3:20pm	Seats (Total: 18) CHM 1330	Lab
6231	Lee Friedman Tu 3:30pm - 6:20pm	Seats (Total: 18) CHM 1302	Lab
6232	Lee Friedman Tu 3:30pm - 6:20pm	Seats (Total: 18) CHM 1308	Lab
6234	Lee Friedman Tu 3:30pm - 6:20pm	Seats (Total: 18) CHM 1330	Lab
6241	Lee Friedman Tu 6:30pm - 9:20pm	Seats (Total: 18) CHM 1302	Lab
6243	Lee Friedman Tu 6:30pm - 9:20pm	Seats (Total: 18) CHM 1326	Lab
6244	Lee Friedman Tu 6:30pm - 9:20pm	Seats (Total: 18) CHM 1330	Lab
6321	Lee Friedman W 12:00pm - 2:50pm	Seats (Total: 18) CHM 1302	Lab
6322	Lee Friedman W 12:00pm - 2:50pm	Seats (Total: 18) CHM 1308	Lab
6323	Lee Friedman W 12:00pm - 2:50pm	Seats (Total: 18) CHM 1326	Lab
6324	Lee Friedman W 12:00pm - 2:50pm	Seats (Total: 18) CHM 1330	Lab

6331	Lee Friedman W 3:00pm - 5:50pm	Seats (Total: 18) CHM 1302	Lab
6332	Lee Friedman W 3:00pm - 5:50pm	Seats (Total: 14) CHM 1308	Lab
6333	Lee Friedman W 3:00pm - 5:50pm	Seats (Total: 18) CHM 1326	Lab
6334	Lee Friedman W 3:00pm - 5:50pm	Seats (Total: 18) CHM 1330	Lab
6343	Lee Friedman W 6:00pm - 8:50pm	Seats (Total: 18) CHM 1326	Lab
6344	Lee Friedman W 6:00pm - 8:50pm	Seats (Total: 18) CHM 1330	Lab
6421	Lee Friedman Th 12:30pm - 3:20pm	Seats (Total: 18) CHM 1302	Lab
6422	Lee Friedman Th 12:30pm - 3:20pm	Seats (Total: 18) CHM 1308	Lab
6423	Lee Friedman Th 12:30pm - 3:20pm	Seats (Total: 18) CHM 1326	Lab
6424	Lee Friedman Th 12:30pm - 3:20pm	Seats (Total: 18) CHM 1330	Lab
6431	Lee Friedman Th 3:30pm - 6:20pm	Seats (Total: 18) CHM 1302	Lab
6432	Lee Friedman Th 3:30pm - 6:20pm	Seats (Total: 18) CHM 1308	Lab
6433	Lee Friedman Th 3:30pm - 6:20pm	Seats (Total: 18) CHM 1326	Lab
6434	Lee Friedman Th 3:30pm - 6:20pm	Seats (Total: 18) CHM 1330	Lab

SEF1	Lee Friedman	Seats (Total: 18)	
	W 7:30pm - 10:30pm	CHM 1308	Lab
<i>Restricted to students in the SIE Program. Click here for more information.</i>			

CHEM247 Principles of Organic Chemistry II

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM237; or permission of CMNS-Chemistry & Biochemistry department. Restriction: Must be in one of the following programs (Chemistry; Biochemistry) ; or must be an honors student. Credit only granted for: CHEM243 or CHEM247.

A continuation of CHEM237 with emphasis on molecular structure, substitution reactions; carbonium ions; aromaticity; synthetic processes; macromolecules.

Students must pay a \$40.00 laboratory materials fee.

6113	Myles Poulin	Seats (Total: 18)	
	MWF 10:00am - 10:50am	CHM 0115	
	M 3:00pm - 5:50pm	CHM 1326	Lab
	Tu 8:00am - 8:50am	CHM 0122	Discussion
6224	Myles Poulin	Seats (Total: 18)	
	MWF 10:00am - 10:50am	CHM 0115	
	Tu 3:30pm - 6:20pm	CHM 1326	Lab
	Tu 9:30am - 10:20am	CHM 0122	Discussion
6323	Myles Poulin	Seats (Total: 18)	
	MWF 10:00am - 10:50am	CHM 0115	
	Tu 12:30pm - 3:20pm	CHM 1326	Lab
	Tu 11:00am - 11:50am	CHM 0122	Discussion

CHEM271 General Chemistry and Energetics

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHEM241 and CHEM242; or CHEM247. And a grade of C- or better in the prerequisites for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: CHEM272. Credit only granted for: CHEM113, CHEM153, CHEM271 or CHEM276. Formerly: CHEM113.

An introduction to the physical aspects of chemistry; chemical kinetics, thermodynamics and electrochemistry in the context of current chemistry research.

2222	Christopher Jarzynski MW 11:00am - 11:50am Tu 8:00am - 8:50am	Seats (Total: 32) CHM 1407 CHM 0127	Discussion
2225	Christopher Jarzynski MW 11:00am - 11:50am Tu 9:30am - 10:20am	Seats (Total: 32) CHM 1407 CHM 0127	Discussion
2227	Christopher Jarzynski MW 11:00am - 11:50am Tu 11:00am - 11:50am	Seats (Total: 32) CHM 1407 CHM 0127	Discussion
2242	Christopher Jarzynski MW 11:00am - 11:50am Th 8:00am - 8:50am	Seats (Total: 32) CHM 1407 CHM 0127	Discussion
2245	Christopher Jarzynski MW 11:00am - 11:50am Th 9:30am - 10:20am	Seats (Total: 32) CHM 1407 CHM 0127	Discussion
2247	Christopher Jarzynski MW 11:00am - 11:50am Th 4:30pm - 5:20pm	Seats (Total: 32) CHM 1407 CHM 0127	Discussion
2326	Efrain Rodriguez MW 3:00pm - 3:50pm Tu 12:30pm - 1:20pm	Seats (Total: 32) CHM 1407 CHM 0127	Discussion
2327	Efrain Rodriguez MW 3:00pm - 3:50pm Tu 2:00pm - 2:50pm	Seats (Total: 32) CHM 1407 CHM 0127	Discussion
2328	Efrain Rodriguez MW 3:00pm - 3:50pm Tu 3:30pm - 4:20pm	Seats (Total: 32) CHM 1407 CHM 0127	Discussion
2346	Efrain Rodriguez MW 3:00pm - 3:50pm Th 12:30pm - 1:20pm	Seats (Total: 32) CHM 1407 CHM 0127	Discussion

2347	Efrain Rodriguez	Seats (Total: 32)	
	MW 3:00pm - 3:50pm	CHM 1407	
	Th 2:00pm - 2:50pm	CHM 0127	Discussion
2348	Efrain Rodriguez	Seats (Total: 32)	
	MW 3:00pm - 3:50pm	CHM 1407	
	Th 3:30pm - 4:20pm	CHM 0127	Discussion
SEF1	Daniel Gowetski	Seats (Total: 20)	
	M 6:00pm - 7:50pm	CHM 0124	
	W 6:30pm - 7:20pm	CHM 0124	Discussion
<i>Restricted to students in the SIE Program. Click here for more information.</i>			

CHEM272 General Bioanalytical Chemistry Laboratory

Credits: 2 Grading Method: Regular,
Pass-Fail

Prerequisite: CHEM241 and CHEM242; or CHEM247. And a grade of C- or better in the prerequisites is required for College of Computer, Mathematical, and Natural Sciences majors and recommended for all students. Corequisite: CHEM271. Credit only granted for: CHEM227, CHEM272 or CHEM277.

An introduction to analytical chemistry with an emphasis on bio-analytical instrumentation and techniques.

Students must pay a \$40.00 laboratory materials fee.

8122	Amanda Schech	Seats (Total: 24)	
	F 11:00am - 11:50am	CHM 1407	
	M 12:00pm - 2:50pm	ESJ 2316	Lab
8132	Amanda Schech	Seats (Total: 24)	
	F 11:00am - 11:50am	CHM 1407	
	M 3:00pm - 5:50pm	ESJ 2316	Lab
8211	Amanda Schech	Seats (Total: 24)	
	F 11:00am - 11:50am	CHM 1407	
	Tu 9:30am - 12:20pm	ESJ 2312	Lab
8222	Amanda Schech	Seats (Total: 24)	
	F 11:00am - 11:50am	CHM 1407	
	Tu 12:30pm - 3:20pm	ESJ 2316	Lab

8231	Amanda Schech F 11:00am - 11:50am Tu 3:30pm - 6:20pm	Seats (Total: 24) CHM 1407 ESJ 2312 Lab
8321	Amanda Schech F 11:00am - 11:50am W 12:00pm - 2:50pm	Seats (Total: 24) CHM 1407 ESJ 2312 Lab
8331	Amanda Schech F 11:00am - 11:50am W 3:00pm - 5:50pm	Seats (Total: 24) CHM 1407 ESJ 2312 Lab
8421	Amanda Schech F 11:00am - 11:50am Th 12:30pm - 3:20pm	Seats (Total: 24) CHM 1407 ESJ 2312 Lab
8431	Amanda Schech F 11:00am - 11:50am Th 3:30pm - 6:20pm	Seats (Total: 24) CHM 1407 ESJ 2312 Lab
9121	Amanda Schech F 3:00pm - 3:50pm M 12:00pm - 2:50pm	Seats (Total: 24) CHM 1407 ESJ 2312 Lab
9131	Amanda Schech F 3:00pm - 3:50pm M 3:00pm - 5:50pm	Seats (Total: 24) CHM 1407 ESJ 2312 Lab
9221	Amanda Schech F 3:00pm - 3:50pm Tu 12:30pm - 3:20pm	Seats (Total: 24) CHM 1407 ESJ 2312 Lab
9232	Amanda Schech F 3:00pm - 3:50pm Tu 3:30pm - 6:20pm	Seats (Total: 24) CHM 1407 ESJ 2316 Lab
9322	Amanda Schech F 3:00pm - 3:50pm W 12:00pm - 2:50pm	Seats (Total: 24) CHM 1407 ESJ 2316 Lab

9332	Amanda Schech F 3:00pm - 3:50pm W 3:00pm - 5:50pm	Seats (Total: 24) CHM 1407 ESJ 2316	Lab
9422	Amanda Schech F 3:00pm - 3:50pm Th 12:30pm - 3:20pm	Seats (Total: 24) CHM 1407 ESJ 2316	Lab
9432	Amanda Schech F 3:00pm - 3:50pm Th 3:30pm - 6:20pm	Seats (Total: 24) CHM 1407 ESJ 2316	Lab
SEF1	Jason Kahn M 8:00pm - 8:50pm W 7:30pm - 10:30pm	Seats (Total: 24) CHM 0124 ESJ 2312	Lab
<i>Restricted to students in the SIE Program. Click here for more information.</i>			

CHEM277

Fundamentals of Analytical and Bioanalytical Chemistry Laboratory

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CHEM241 and CHEM242; or minimum grade of C- in CHEM247.

Corequisite: CHEM276. Restriction: Must be in one of the following programs (Chemistry; Biochemistry). Credit only granted for: CHEM153, CHEM227, CHEM272 or CHEM277.

Quantitative analysis, inorganic analytical chemistry, and an introduction to bio-analytical instrumentation and techniques.

Students must pay a \$40.00 lab materials fee.

8111	Neil Blough F 11:00am - 11:50am MW 12:00pm - 2:50pm	Seats (Total: 18) CHM 0119 ESJ 0312	Lab
8211	Neil Blough F 11:00am - 11:50am TuTh 12:30pm - 3:20pm	Seats (Total: 18) CHM 0119 ESJ 0312	Lab

CHEM398

Special Projects

(Perm req)

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Honors projects for undergraduate students.

Limited to chemistry honors students. Consult with Dr. Montague-Smith.

Contact department for information to register for this course.

CHEM399A Introduction to Chemical Research

(Perm req)

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

Basic (chemical) research conducted under the supervision of a faculty member.

Contact department for information to register for this course.

CHEM399B Introduction to Chemical Research

(Perm req)

Credits: 2

Grading Method: Regular,
Pass-Fail, Audit

Basic (chemical) research conducted under the supervision of a faculty member.

Contact department for information to register for this course.

CHEM399C Introduction to Chemical Research

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Basic (chemical) research conducted under the supervision of a faculty member.

Contact department for information to register for this course.

CHEM399X Introduction to Chemical Research; Chemistry Instruction

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Basic (chemical) research conducted under the supervision of a faculty member.

0101	Michael Montague-Smith	Seats (Total: 8)
Contact instructor or department for details.		
0102	Lee Friedman	Seats (Total: 30)
Contact instructor or department for details.		

CHEM403 Radiochemistry

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed one year of college chemistry and one year of college physics.

Radioactive decay; introduction to properties of atomic nuclei; nuclear processes in cosmology; chemical, biomedical and environmental applications of radioactivity; nuclear processes as chemical tools; interaction of radiation with matter.

0101	Alice Mignerey	Seats (Total: 40)
	MWF 12:00pm - 12:50pm	CHM 0128

CHEM425 Instrumental Methods of Analysis

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHEM272 and CHEM271; or (CHEM276 and CHEM277).

Modern instrumentation in analytical chemistry. Electronics, spectroscopy, chromatography and electrochemistry.

Students must pay a \$40.00 laboratory materials fee.

0101	Peter Nemes	Seats (Total: 12)
	MW 10:00am - 10:50am	CHM 1402
	MW 12:00pm - 2:50pm	CHM 3228 Lab
0102	Peter Nemes	Seats (Total: 12)
	MW 10:00am - 10:50am	CHM 1402
	TuTh 12:30pm - 3:20pm	CHM 3228 Lab
0104	Peter Nemes	Seats (Total: 12)
	MW 10:00am - 10:50am	CHM 1402
	TuTh 9:30am - 12:20pm	CHM 3228 Lab
0105	Peter Nemes	Seats (Total: 12)
	MW 10:00am - 10:50am	CHM 1402
	MW 6:00pm - 8:50pm	CHM 3228 Lab
0109	Peter Nemes	Seats (Total: 12)
	MW 10:00am - 10:50am	CHM 1402
	TuTh 6:30pm - 9:20pm	CHM 3228 Lab

CHEM441 Advanced Organic Chemistry

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in CHEM481; and 1 course with a minimum grade of C- from (CHEM241, CHEM247). Jointly offered with CHEM641.

An advanced study of the compounds of carbon, with special emphasis on molecular orbital theory and organic reaction mechanisms.

0101	Lyle Isaacs	Seats (Total: 27)
	MW 4:00pm - 5:15pm	CHM 0124

CHEM460 Structure Determination Using Spectroscopic Methods

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed CHEM243; or CHEM247; or (CHEM241 and CHEM242). Formerly: CHEM660.

The use of infrared, ultraviolet-visible, proton and carbon-13 nuclear magnetic resonance and mass spectroscopy for structure determination in organic chemistry.

0101	Daniel Falvey	Seats (Total: 40)
	MWF 10:00am - 10:50am	CHM 0119

CHEM481 Physical Chemistry I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM135; or minimum grade of C- in CHEM271 and CHEM272; or minimum grade of C- in CHEM276 and CHEM277. And minimum grade of C- in MATH141. And minimum grade of C- in PHYS260 and PHYS261; or minimum grade of C- in PHYS141.

Thermodynamics and kinetics of chemical and molecular systems. Topics may include internal energy, heat, work, enthalpy, entropy, free energy, and spontaneity as well as reaction order, differential rate laws, integrated rate laws, and rate laws for multi-step processes.

0101	Millard Alexander	Seats (Total: 116)
	MWF 9:00am - 9:50am	CHM 1402

CHEM482 Physical Chemistry II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM481.

Quantum mechanical nature of atoms and molecules. Topics may include model systems for electronic, vibrational, rotational and translational energies as well as connections to molecular spectroscopy and thermal distributions.

0101	YuHuang Wang	Seats (Total: 42)
	MWF 9:00am - 9:50am	CHM 0119

CHEM483 Physical Chemistry Laboratory I

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in CHEM481.

An introduction to the principles and application of quantitative techniques in physical chemical measurements. Experiments will be coordinated with topics in CHEM481.

Students must pay a \$40.00 lab materials fee.

0114	Earle Stone	Seats (Total: 18)
	Th 11:00am - 11:50am	PLS 1130
	Tu 9:30am - 12:20pm	CHM 3225 Lab
0124	Earle Stone	Seats (Total: 18)
	Th 11:00am - 11:50am	PLS 1130
	Tu 2:00pm - 4:50pm	CHM 3225 Lab
0144	Earle Stone	Seats (Total: 18)
	Th 11:00am - 11:50am	PLS 1130
	W 2:00pm - 4:50pm	CHM 3225 Lab

CHEM484 Physical Chemistry Laboratory II

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHEM481 and CHEM483; and must have completed or be concurrently enrolled in CHEM482.

A continuation of CHEM 483. Advanced quantitative techniques necessary in physical chemical measurements. Experiments will be coordinated with topics in CHEM 482.

Students must pay a \$40.00 laboratory materials fee.

0124	Earle Stone	Seats (Total: 12)
	Th 3:30pm - 4:20pm	CHM 0124
	W 10:00am - 12:50pm	CHM 3221 Lab
0134	Earle Stone	Seats (Total: 12)
	Th 3:30pm - 4:20pm	CHM 0124
	W 3:00pm - 5:50pm	CHM 3221 Lab

CHEM601 Structure and Bonding of Molecules and Materials

Credits: 3 Grading Method: Regular,
Audit

Development of the tools necessary to use the knowledge of structure and bonding of molecules and solids in the practice of synthetic inorganic and materials chemistry. Several bonding models are covered, from the simple valence bond and ligand field models to a quantitative group theoretical treatment of molecular orbital theory and band structure descriptions of solids. Concepts of electron counting and oxidation state and ligand characteristics are revisited in terms of the more sophisticated bonding models. Finally, these models are used to analyze the reactivity, magnetic and spectroscopic properties of inorganic coordination compounds. Prior advanced inorganic and/or advanced quantum chemistry courses are not prerequisites.

0101	Lawrence Sita	Seats (Total: 21)
	MWF 9:00am - 9:50am	CHM 0124

CHEM608K Selected Topics in Inorganic Chemistry; Chemistry Teaching and Learning in Higher Education

(Perm req)

Credits: 2 Grading Method: Regular,
Audit

Topics of special interest and current importance.

Cross-listed with BIOL608K, CBMG699K, and ENTM699K. Credit will be granted for only one of the following: BIOL608K, CBMG699K, CHEM608K, or ENTM699K.

0101	Gili Ad-Marbach	Seats (Total: 12)
	W 11:00am - 12:40pm	BPS 1208

CHEM611 Professional Skills for New Graduate Students

Credits: 1 Grading Method: Regular,
Audit

Restriction: Must be in one of the following programs (Chemistry (Master's); Biochemistry (Master's); Biochemistry (Doctoral); Chemistry (Doctoral)) ; and must be a new graduate student.

Covers a wide range of topics in professional development for new graduate students.

0101	Efrain Rodriguez	Seats (Total: 40)
	F 2:00pm - 3:15pm	CHM 0128

CHEM624 Electrical Methods of Quantitative Analysis

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: CHEM482; or students who have taken courses with comparable content may contact the department.

The use of conductivity, potentiometry, polarography, voltammetry, amperometry, coulometry, and chronopotentiometry in quantitative analysis.

0101	Sangbok Lee	Seats (Total: 27)
	TuTh 8:00am - 9:15am	CHM 0124

CHEM640 Problems in Organic Reaction Mechanisms

Credits: 1 Grading Method: Regular,
 Audit

A tutorial type course dealing with the basic description of the fundamentals of writing organic reaction mechanisms.

0101	Jeffery Davis	Seats (Total: 20)
	F 12:00pm - 12:50pm	CHM 0124

CHEM641 Organic Reaction Mechanisms

Credits: 3 Grading Method: Regular,
 Audit

Jointly offered with CHEM441.

0101	Lyle Isaacs	Seats (Total: 27)
	MW 4:00pm - 5:15pm	CHM 0124

CHEM648K Special Topics in Organic Chemistry; Bio-inspired Supramolecular Chemistry

Credits: 3 Grading Method: Regular,
 Audit

Topics of special interest and current importance.

0101	Jeffery Davis	Seats (Total: 18)
	TuTh 9:30am - 10:45am	CHM 3219

CHEM682 Chemical Kinetics and Dynamics

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: CHEM482; or permission of instructor. Restriction: Restricted to graduate students or advanced undergraduates with prerequisites.

The dynamics of atoms and molecules as they undergo chemical and physical change. Topics will be developed from a fundamental perspective and modern applications will be discussed. Topics include: chemical kinetics rate equations, atomic and molecular collisions; rate theories; atomic, molecular and chemical lasers; control of matter with light.

0101	Amy Mullin	Seats (Total: 20)
	MWF 9:00am - 9:50am	CHM 0115

CHEM684 Chemical Thermodynamics

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: CHEM482; or students who have taken courses with comparable content may contact the department.

0101	John Weeks	Seats (Total: 27)
	TuTh 11:00am - 12:15pm	CHM 0124

CHEM690 Quantum Chemistry I

Credits: 3 Grading Method: Regular,
Audit

0101	Leah Dodson	Seats (Total: 25)
	TuTh 9:30am - 10:45am	CHM 0124

CHEM699 Special Problems in Chemistry

Credits: 1-6 Grading Method: Regular,
Audit

Laboratory experience in a research environment.

Open only to non-thesis Master's degree candidates.

Contact department for information to register for this course.

CHEM799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

CHEM889A Seminar

Credits: 1 Grading Method: Regular,
Audit

0101	Alice Mignerey	Seats (Total: 15)
	W 11:00am - 11:50am	CHM 0112

CHEM889C Seminar

Credits: 1 Grading Method: Regular,
Audit

0101	Efrain Rodriguez	Seats (Total: 30)
	Th 11:00am - 11:50am	CHM 0112

CHEM889D Seminar; Organic

Credits: 1 Grading Method: Regular,
Audit

0101	Efrain Rodriguez	Seats (Total: 20)
	Th 11:00am - 11:50am	CHM 0112

CHEM889E Seminar; Physical Chemistry

Credits: 1 Grading Method: Regular,
Audit

Cross-listed with CHEM898F and CHPH709A. Credit will be granted for one of the following:
CHEM889E, CHEM889F, or CHPH709A.

0101	Pratyush Tiwary	Seats (Total: 15)
	W 11:00am - 11:50am	CHM 0112

CHEM889F Seminar; Chemical Physics

Credits: 1 Grading Method: Regular, Audit

Cross-listed with CHEM898E and CHPH709A. Credit will be granted for one of the following: CHEM889E, CHEM889F, or CHPH709A.

0101	Pratyush Tiwary	Seats (Total: 15)
	W 11:00am - 11:50am	CHM 0112

CHEM889M Seminar; Materials Chemistry

Credits: 1 Grading Method: Regular, Audit

Contact department for information to register for this course.

CHEM898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

CHEM899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

CHIN **Chinese** **Fall 2019**

CHIN101 **Intensive Elementary Chinese I**

(Perm req)

Credits: 6 Grading Method: Regular

Prerequisite: Must have attained appropriate Foreign Language Placement Test (FLPT) score.

Introduction to speaking, reading, and writing Chinese with an emphasis on mastering the essentials of pronunciation, basic characters and structural patterns.

0101	Guiling Hu, Jungjung Lee-Heitz	Seats (Total: 15)
	MWF 10:00am - 10:50am	JMZ 1215
	TuTh 9:30am - 10:45am	JMZ 1215
0201	Jungjung Lee-Heitz, Guiling Hu	Seats (Total: 15)
	MWF 11:00am - 11:50am	JMZ 1215
	TuTh 11:00am - 12:15pm	JMZ 1215

0301	Guiling Hu	Seats (Total: 15)
	MWF 1:00pm - 1:50pm	JMZ 3120
	Class time/details on ELMs	ONLINE

CHIN169A Special Topics in Study Abroad I; Elementary Chinese I

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN169B Special Topics in Study Abroad I; Elementary Chinese II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN201 Intermediate Spoken Chinese I

(Perm req)

Credits: 3 Grading Method: Regular CORE: HO

Prerequisite: CHIN102; or must have attained appropriate Foreign Language Placement Test (FLPT) score. Corequisite: CHIN202. Additional information: Must be taken in conjunction with CHIN202.

Emphasis on development of conversational skills with vocabulary build-up and controlled conversation.

0101	Mei Kong	Seats (Total: 15)
	MWF 11:00am - 11:50am	JMZ 2122
0201	Mei Kong	Seats (Total: 15)
	MWF 3:00pm - 3:50pm	JMZ 1226

CHIN202 Intermediate Written Chinese I

(Perm req)

Credits: 3 Grading Method: Regular CORE: HO

Prerequisite: CHIN103; or must have attained appropriate Foreign Language Placement Test (FLPT) score. Corequisite: CHIN201. Additional information: Must be taken in conjunction with CHIN201.

Reading and writing skills with emphasis on grammar and Chinese characters.

0101	Minglang Zhou	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	JMZ 3203
0201	Jungjung Lee-Heitz	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	JMZ 3118

CHIN203 Intermediate Spoken Chinese II

Credits: 3 Grading Method: Regular, CORE: HO
 Pass-Fail, Audit

Prerequisite: CHIN201; or students who have taken courses with comparable content may contact the department; or must have attained appropriate Foreign Language Placement Test (FLPT) score.
Corequisite: CHIN204. Additional information: Must be taken in conjunction with CHIN204.

Continuation of CHIN201.

Contact department for information to register for this course.

CHIN269B Special Topics in Study Abroad II; Chinese Business Issues and Practices

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN269I Special Topics in Study Abroad II; Intermediate Spoken Chinese I

Credits: 1-2 Grading Method: Regular,
 Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN269P Special Topics in Study Abroad II; The China Phenomenon

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN269W Special Topics in Study Abroad II; Chinese Calligraphy II

Credits: 2 Grading Method: Regular,
 Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN301 Advanced Chinese I

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: CHIN202; or students who have taken courses with comparable content may contact the department. And must have taken a placement interview offered by the department for Non-majors.

Readings in expository and fictional writing with conversation and composition.

0101	Yuli Wang	Seats (Total: 15)
	MWF 11:00am - 11:50am	JMZ 2207
0201	Yuli Wang	Seats (Total: 15)
	MWF 12:00pm - 12:50pm	JMZ 2206

CHIN307 Linguistic Landscape of China

Credits: 3 Grading Method: Regular, General Education: DSHU
Pass-Fail, Audit

Prerequisite: Must have completed CHIN204 or above; or permission of Chinese Program Advisor.

Comprehensive introduction to Chinese and other major languages in the Sino-Tibetan, Altaic, Austroasiatic, and Austronesian families, all of which are spoken in China. Taught in English.

0101	Minglang Zhou	Seats (Total: 25)
	TuTh 9:30am - 10:45am	JMZ 1224

CHIN313 Chinese Poetry and Prose in Translation

Credits: 3 Grading Method: Regular, , D
Pass-Fail, Audit

Writing of the major poets, essayists, and historians from the 10th century B.C. to the 12th century A.D. No knowledge of Chinese is required.

Contact department for information to register for this course.

CHIN315 Modern Chinese Literature in Translation

Credits: 3 Grading Method: Regular, , D General Education: DSHU
Pass-Fail, Audit

Major works of fiction and drama from 1920 to the present read in the context of social and literary change. Emphasis on western and traditional Chinese influences on the writers and their works. No knowledge of Chinese required.

0101	Ying Xue Liu	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	JMZ 2122

CHIN332 Chinese Culture through Traditional Chinese Arts

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Study of calligraphy, music, painting, and taichi coupled with critical readings of scholarly and literary texts. Facilitates an understanding of China and Chinese culture through traditional Chinese arts. Taught in English.

0101	Yuli Wang	Seats (Total: 20)
	Tu 2:00pm - 4:45pm	JMZ 0205

CHIN369B Special Topics in Study Abroad III; Advanced Chinese I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN369C Special Topics in Study Abroad III; Advanced Chinese II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN369D Special Topics in Study Abroad III; Advanced Chinese III

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN369E Special Topics in Study Abroad III; Advanced Chinese IV

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CHIN386 Experiential Learning

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Prerequisite: Must have learning proposal approved by the Office of Experiential Learning Programs, faculty sponsor, and student's internship sponsor. Restriction: Junior standing or higher.

Contact department for information to register for this course.

CHIN401 Readings in Modern Chinese I

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: CHIN302; or students who have taken courses with comparable content may contact the department. And must have taken a placement interview offered by the department for Non-majors.

Readings in history, politics, economics, sociology, and literature. Emphasis on wide-ranging, rapid reading, reinforced by conversations and compositions.

0101	Mei Kong	Seats (Total: 15)
	MWF 10:00am - 10:50am	JMZ 1120
0201	Mei Kong	Seats (Total: 15)
	MWF 2:00pm - 2:50pm	JMZ 1120

CHIN411 Business Chinese I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHIN402; or permission of ARHU-School of Languages, Literatures, and Cultures department. And must have taken a placement interview offered by the department for Non-majors.

Conversation, reading, and writing applicable to Chinese business transactions, social meetings, and meetings with government organizations, plus background material in English on professional business practices and social customs associated with business.

0101	Jungjung Lee-Heitz	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	JMZ 1215

CHIN418F**Special Topics in Contemporary Chinese Fiction and Film; Literature and the City**

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Various approaches to the most recent textual productions of China and Taiwan. Taught in Chinese.

Prerequisite: CHIN401 or equivalent This seminar course surveys Chinese literature and film that engage with the rapidly changing urban cultures of Chinese and Sinophone communities . Beijing, Shanghai, Hong Kong, Taipei, and American Chinatowns will be the focus of this course. Primary readings are in Chinese; critical readings in English. Discussion is conducted in Chinese, with the occasional aid of English.

0101	Ying Xue Liu	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	JMZ 2207

CHIN441**Traditional Chinese Fiction**

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Prerequisite: Permission of ARHU-School of Languages, Literatures, and Cultures department.

Major works of fiction from the 4th century tales of the marvelous through the 19th century Qing novel. Readings are in classical Chinese and English. Designed for students with advanced language skills. Taught in English.

0101	Andrew Schonebaum	Seats (Total: 18)
	TuTh 12:30pm - 1:45pm	JMZ 3203

CHIN499**Directed Study in Chinese**

(Perm req)

Credits: 1-3 Grading Method: Regular,
 Pass-Fail

Readings in Chinese under faculty supervision.

Contact department for information to register for this course.

CHPH**Chemical Physics****Fall 2019****CHPH618****Special Projects in Chemical Physics**

(Perm req)

Credits: 2 Grading Method: Regular,
 Audit

Independent reading and study covering chemical physics subject areas not available in other courses.

Contact department for information to register for this course.

CHPH709A

Credits: 1

Current research and developments in chemical physics.

Jointly offered with CHEM898E and CHEM898F. Credit will be granted for one of the following: CHEM889E, CHEM889F, or CHPH709A.

0101	Pratyush Tiwary	Seats (Total: 15)
	W 11:00am - 11:50am	CHM 0112

CHPH709B

Credits: 1

Current research and developments in chemical physics.

Cross-listed with PHYS709.

0101	John Weeks	Seats (Total: 30)
	Tu 1:15pm - 2:30pm	IPT 1116

CHPH709L

Credits: 1

Current research and developments in chemical physics.

0101	Arpita Upadhyaya	Seats (Total: 10)
	M 4:00pm - 5:30pm	IPT 1116

CHPH718I

(Perm req)

Credits: 1-3

A discussion of current research problems in chemical physics.

For Chemical Physics Students only.

0201	Christopher Jarzynski	Seats (Total: 10)
	Contact instructor or department for details.	

CHPH799 Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.**CHPH898 Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.**CHPH899 Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

CLAS Classics**Fall 2019**

CLAS169M Special Topics in Study Abroad I; Myths and LegendsCredits: 3 Grading Method: Regular,
Pass-Fail, Audit*Special topics course taken as part of an approved study abroad program.***Contact department for information to register for this course.****CLAS169R Special Topics in Study Abroad I; Ancient Rome: Civilization and Legacy**Credits: 3 Grading Method: Regular,
Pass-Fail, Audit*Special topics course taken as part of an approved study abroad program.***Contact department for information to register for this course.****CLAS170 Greek and Roman Mythology**Credits: 3 Grading Method: Regular, CORE: HL General Education: DSHU
Pass-Fail, Audit*Cross-listed with RELS170. Credit only granted for: CLAS170 or RELS170. Additional information:
This course cannot be taken for language credit.**An introduction to the mythology of ancient Greece and Rome. This course is particularly recommended
for students planning to major in foreign languages, English, history, the fine arts, or journalism. Taught
in English.*

0101	Gregory Staley MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 21) MMH 1400 PLS 1111	Discussion
0102	Gregory Staley MW 11:00am - 11:50am Th 9:30am - 10:20am	Seats (Total: 21) MMH 1400 JMP 2202	Discussion
0103	Gregory Staley MW 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 21) MMH 1400 CHM 0119	Discussion
0104	Gregory Staley MW 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 21) MMH 1400 CHM 1228	Discussion
0105	Gregory Staley MW 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 21) MMH 1400 CHM 0124	Discussion
0106	Gregory Staley MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 21) MMH 1400 PLS 1164	Discussion
0107	Gregory Staley MW 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 21) MMH 1400 PLS 1113	Discussion
0108	Gregory Staley MW 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 21) MMH 1400 CHM 0127	Discussion
0109	Gregory Staley MW 11:00am - 11:50am Th 9:30am - 10:20am	Seats (Total: 22) MMH 1400 EGR 1102	Discussion
FC01	Madeleine Goh TuTh 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 22) TLF 1103	

FC02	Madeleine Goh TuTh 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 22) TLF 1101
FC03	Madeleine Goh MW 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 22) TLF 1101
FC04	Talia Chicherio TuTh 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 22) KEY 0116
FCB1	William Proffitt W 6:00pm - 7:15pm Contact instructor or department for details. <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 22) ASY 3207

CLAS275
Why do we laugh?

Credits: 3 Grading Method: Regular, General Education: DSHU,
Pass-Fail SCIS

Additional information: All readings will be done in English translation.

An introduction to the breadth and complexity of humor's role in society. Students will explore ancient Greek and Roman comedies side-by-side with contemporary sitcoms and movies, to learn the explanations that various disciplines have offered about why we laugh, and to understand the major impact humor has in how we see ourselves and our world.

Class will meet in ESJ 1202 with the exception of Tuesday, August 27 and Thursday, October 24; in which it will meet in TWS 1100.

0101	Francisco Barrenechea TuTh 11:00am - 12:15pm	Seats (Total: 75) Location: TBA
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CLAS311
Inventing Ancient Greek Culture

Credits: 3 Grading Method: Regular, General Education: DSHU,
Pass-Fail, Audit DVUP

Cross-listed with: HIST328D. Credit only granted for: CLAS311 or HIST328D.

Who were the ancient Greeks, and were they the founders of Western civilization? The course examines the foundations of ancient Greece. Through an analysis of the historical, archaeological, and linguistic evidence, it sheds light on the so-called Black Athena Controversy, which raised doubts about the ancient Greek contribution to Western culture. The course also focuses on the impact of modern identity politics on scholarly discussions of antiquity and the ways in which the Culture Wars of the 1980s and 1990s have influenced analyses of the ancient Greek world.

0101	Eric Adler	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	SQH 1107

CLAS320 Women in Classical Antiquity

Credits: 3 Grading Method: Regular, Pass-Fail, Audit, D General Education: DSHU, DVUP

Cross-listed with: HIST328W, WMST320. Credit only granted for: CLAS320, WMST320, or HIST328W.

A study of women's image and reality in ancient Greek and Roman societies through an examination of literary, linguistic, historical, legal, and artistic evidence; special emphasis in women's role in the family, views of female sexuality, and the place of women in creative art. Readings in primary sources in translation and modern critical writings.

0101	Lillian Doherty	Seats (Total: 35)
	TuTh 9:30am - 10:45am	KEY 0126

CLAS499 Independent Study in Classical Languages and Literatures

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

Contact department for information to register for this course.

CLFS Chemical and Life Sciences Fall 2019

CLFS608 Seminar in Current Topics in Chemical and Life Science; Scholarly Paper

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Seminar in current topics in the Life Sciences. Contact Program Director or instructor before registering.

Contact Dr. Brett Kent (bkent@umd.edu) to establish a mentor; and then contact the Office of Extended Studies (oes@umd.edu) to register.

Contact department for information to register for this course.

CLFS608A Seminar in Current Topics in Chemical and Life Science; Independent Research

(Perm req)

Credits: 1-3

Grading Method: Regular,
Audit

Seminar in current topics in the Life Sciences. Contact Program Director or instructor before registering.

Contact the Office of Extended Studies (oes@umd.edu) to register.

Contact department for information to register for this course.

CLFS609A Special Topics; Food Safety and GM Foods

Credits: 3

Grading Method: Regular,
Audit

Individual instruction course. Contact Program Director or instructor before registering.

Must be in Master of Chemical & Life Sciences program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.

PL01	Lucinda Jack	Seats (Total: 15)
	Meets August 26, 2019 - November 15, 2019	
	Class time/details on ELMs	ONLINE

CLFS609K Special Topics; Current Topics in Biomedical Research

Credits: 3

Grading Method: Regular,
Audit

Individual instruction course. Contact Program Director or instructor before registering.

Must be in Master of Chemical & Life Sciences program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.

PL01	Cristina Banuelos	Seats (Total: 15)
	Meets August 26, 2019 - November 15, 2019	
	Class time/details on ELMs	ONLINE

CLFS620 Modern Molecular Genetics

Credits: 3

Grading Method: Regular,
Audit

An overview of genetics including the genetic basis/components in prevalent diseases, genetically engineered organisms and foods, the importance of knowing the complete DNA sequence of organisms.

Must be in Master of Chemical & Life Sciences program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.

Click here for program information.

PL01	Paul Bottino	Seats (Total: 15)
	Meets August 26, 2019 - November 15, 2019	
	Class time/details on ELMs	ONLINE

CMLT Comparative Literature Fall 2019

CMLT235 Black Diaspora Literature and Culture

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL, D General Education: DSHU, DVUP

Credit only granted for: CMLT235 or ENGL235.

Examination of key works by writers of the African Diaspora. Relationship among black people across multiple geographic spaces; Africa, the Caribbean, the United States, Europe, Latin America, and Asia. Specific historical, cultural, and literary contexts; themes such as gender, sexuality, migration, slavery, freedom, and equality. Readings may include literary texts (fiction, poetry, drama), music and film. All readings in English, but drawn from multiple languages of the black diaspora, including English, Spanish, French and Portuguese.

0101	Alexandria Nunn	Seats (Total: 30)
	TuTh 9:30am - 10:45am	VMH 1203

CMLT269C Special Topics in Study Abroad II; Modern Catalan Literature

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CMLT270 Global Literature and Social Change

Credits: 3 Grading Method: Regular CORE: HL, D General Education: DSHU, DVUP

Comparative study of literature through selected literary works from several non-Western cultures, viewed cross-culturally in light of particular social, political, and economic perspectives.

0101	Fatima Taha	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	TWS 1107
0201	Keisha Allan	Seats (Total: 30)
	MWF 11:00am - 11:50am	KEY 0125

CMLT275 World Literature by Women

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL, D General Education: DSHU, DVUP

Cross-listed with WMST275. Credit only granted for: CMLT275 or WMST275.

Comparative study of selected works by women writers of several countries, exploring points of intersection and divergence in women's literary representations.

0201	Nabila Hijazi	Seats (Total: 30)
	MW 2:00pm - 3:15pm	TWS 0214
0301	Nahid Ahmadian	Seats (Total: 30)
	TuTh 5:00pm - 6:15pm	KEY 0125

CMLT277 Literatures of the Americas

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL, D General Education: DSHU, DVUP

Comparative study of several North, South, and Central American cultures with a focus on the specificities, similarities, and divergences of their literary and cultural texts.

0101	Kristofer Reed	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	TWS 0214

CMLT280 Film Art in a Global Society

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HA, D General Education: DSHU, DVUP

Comparative study of a variety of film traditions from around the world, including cinema from Hollywood, Europe, Asia and developing countries, with a stress on different cultural contexts for film-making and viewing.

Cross-listed with FILM298D. Credit only granted for: CMLT280 or FILM298D .

0101	Shalom Rosenberg MWF 12:00pm - 12:50pm	Seats (Total: 30) JMZ 0125
0201	Tung-An Wei TuTh 11:00am - 12:15pm	Seats (Total: 30) TWS 0201

CMLT369A Special Topics in Study Abroad III; Postcolonial Literatures in English I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CMLT369T Special Topics in Study Abroad III; Politics and Literature in the 20th Century

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CMLT369X Special Topics in Study Abroad III; Shakespeare and Lope de Vega

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

CMLT386 Experiential Learning

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Restriction: Junior standing or higher; and permission of ARHU-English department.

Contact department for information to register for this course.

CMLT398L Special Topics in Comparative Studies; Sexuality in the Cinema

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics in comparative studies.

Cross-listed with ENGL329C. Credit will be granted for only one of the following: CMLT398L, CMLT498L, or ENGL329C.

0101	Eugene Robinson	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

CMLT398N Special Topics in Comparative Studies; Gypsy Culture

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Special topics in comparative studies.

Cross-listed with ENGL379V. Credit will be granted for only one of the following: CMLT398N, CMLT498N, or ENGL379V.

0101	Eugene Robinson	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

CMLT398T Special Topics in Comparative Studies; Postcolonial Literature in English I

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Special topics in comparative studies.

Contact department for information to register for this course.

CMLT498V Selected Topics in Comparative Studies; Lost in Translation

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Contact department for information to register for this course.

CMLT699 Independent Study

(Perm req)

Credits: 1-6 Grading Method: Regular

Research and writing on specific readings on a topic selected by the student which is approved and supervised by a faculty member.

Contact department for information to register for this course.

CMLT799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

CMLT898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular
Contact department for information to register for this course.

CMLT899 Doctoral Dissertation Research

(Perm req) Credits: 6 Grading Method: Regular
Contact department for information to register for this course.

CMSC Computer Science Fall 2019

CMSC106 Introduction to C Programming

Credits: 4 Grading Method: Regular

Prerequisite: MATH115. Restriction: Must not be in Computer Science program; and must not have completed any courses from CMSC131-499 course range. Credit only granted for: CMSC106, CMSC122, or INST126.

Design and analysis of programs in C. An introduction to computing using structured programming concepts. Intended for students with no or minimal programming experience.

0101	Anthony Banes	Seats (Total: 48)
	MW 2:00pm - 3:15pm	CSI 3117
	MW 5:00pm - 5:50pm	CSI 1121 Discussion

CMSC122 Introduction to Computer Programming via the Web

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: IE General Education: DSSP

Restriction: Must not have completed any courses from CMSC131-499 course range; and must not be concurrently enrolled in CMSC131. Credit only granted for: CMSC106, or CMSC122.

Introduction to computer programming in the context of developing full featured dynamic web sites. Uses a problem solving approach to teach basics of program design and implementation using JavaScript; relates these skills to creation of dynamic web sites; then explores both the potential and limits of web-based information sources for use in research. Intended to help relate a student's major to these emerging technologies.

0101	Ilchul Yoon	Seats (Total: 125)
	MWF 1:00pm - 1:50pm	CSI 1115
0201	Pedram Sadeghian	Seats (Total: 88)
	MWF 12:00pm - 12:50pm	IRB 0318

CMSC131**Object-Oriented Programming I**

Credits: 4

Grading Method: Regular

Corequisite: MATH140.

Introduction to programming and computer science. Emphasizes understanding and implementation of applications using object-oriented techniques. Develops skills such as program design and testing as well as implementation of programs using a graphical IDE. Programming done in Java.

0101	Evan Golub MWF 4:00pm - 4:50pm MW 12:00pm - 12:50pm	Seats (Total: 34) ESJ 0202 CSI 2120	Discussion
0102	Evan Golub MWF 4:00pm - 4:50pm MW 2:00pm - 2:50pm	Seats (Total: 34) ESJ 0202 CSI 2118	Discussion
0103	Evan Golub MWF 4:00pm - 4:50pm MW 10:00am - 10:50am	Seats (Total: 34) ESJ 0202 CSI 2120	Discussion
0104	Evan Golub MWF 4:00pm - 4:50pm MW 11:00am - 11:50am	Seats (Total: 34) ESJ 0202 CSI 2120	Discussion
0105	Evan Golub MWF 4:00pm - 4:50pm MW 2:00pm - 2:50pm	Seats (Total: 34) ESJ 0202 CSI 2120	Discussion
0106	Evan Golub MWF 4:00pm - 4:50pm MW 9:00am - 9:50am	Seats (Total: 34) ESJ 0202 CSI 2120	Discussion
0107	Evan Golub MWF 4:00pm - 4:50pm MW 10:00am - 10:50am	Seats (Total: 36) ESJ 0202 CSI 3118	Discussion
0108	Evan Golub MWF 4:00pm - 4:50pm MW 11:00am - 11:50am	Seats (Total: 36) ESJ 0202 CSI 3118	Discussion

0109	Evan Golub MWF 4:00pm - 4:50pm MW 1:00pm - 1:50pm	Seats (Total: 30) ESJ 0202 CSI 2120	Discussion
0201	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 25) IRB 0324 IRB 1207	Discussion
0202	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 25) IRB 0324 IRB 1207	Discussion
0203	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 4:00pm - 4:50pm	Seats (Total: 25) IRB 0324 IRB 1207	Discussion
0204	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 30) IRB 0324 IRB 1207	Discussion
0205	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 11:00am - 11:50am	Seats (Total: 30) IRB 0324 IRB 1207	Discussion
0206	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 9:00am - 9:50am	Seats (Total: 25) IRB 0324 IRB 1207	Discussion
0207	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 5:00pm - 5:50pm	Seats (Total: 25) IRB 0324 IRB 1207	Discussion
0208	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 10:00am - 10:50am	Seats (Total: 25) IRB 0324 IRB 2107	Discussion
0209	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 5:00pm - 5:50pm	Seats (Total: 25) IRB 0324 IRB 2207	Discussion

0210	Fawzi Emad MWF 12:00pm - 12:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 32) IRB 0324 IRB 2207	Discussion
0301	Nelson Padua-Perez MWF 9:00am - 9:50am MW 10:00am - 10:50am	Seats (Total: 32) IRB 0324 IRB 2207	Discussion
0302	Nelson Padua-Perez MWF 9:00am - 9:50am MW 11:00am - 11:50am	Seats (Total: 32) IRB 0324 IRB 2207	Discussion
0303	Nelson Padua-Perez MWF 9:00am - 9:50am MW 12:00pm - 12:50pm	Seats (Total: 32) IRB 0324 IRB 2107	Discussion
0304	Nelson Padua-Perez MWF 9:00am - 9:50am MW 1:00pm - 1:50pm	Seats (Total: 32) IRB 0324 IRB 2207	Discussion
0305	Nelson Padua-Perez MWF 9:00am - 9:50am MW 2:00pm - 2:50pm	Seats (Total: 32) IRB 0324 IRB 2107	Discussion
0306	Nelson Padua-Perez MWF 9:00am - 9:50am MW 3:00pm - 3:50pm	Seats (Total: 32) IRB 0324 IRB 2207	Discussion
0307	Nelson Padua-Perez MWF 9:00am - 9:50am MW 5:00pm - 5:50pm	Seats (Total: 32) IRB 0324 IRB 2207	Discussion
0401	Fawzi Emad MWF 11:00am - 11:50am TuTh 2:00pm - 2:50pm	Seats (Total: 32) IRB 0324 IRB 2207	Discussion
0402	Fawzi Emad MWF 11:00am - 11:50am TuTh 10:00am - 10:50am	Seats (Total: 32) IRB 0324 IRB 1207	Discussion

0403	Fawzi Emad	Seats (Total: 32)	
	MWF 11:00am - 11:50am	IRB 0324	
	TuTh 11:00am - 11:50am	IRB 2107	Discussion
0404	Fawzi Emad	Seats (Total: 34)	
	MWF 11:00am - 11:50am	IRB 0324	
	TuTh 1:00pm - 1:50pm	IRB 1207	Discussion
0405	Fawzi Emad	Seats (Total: 32)	
	MWF 11:00am - 11:50am	IRB 0324	
	TuTh 12:30pm - 1:20pm	IRB 2207	Discussion
0406	Fawzi Emad	Seats (Total: 17)	
	MWF 11:00am - 11:50am	IRB 0324	
	TuTh 9:00am - 9:50am	IRB 1207	Discussion
0407	Fawzi Emad	Seats (Total: 16)	
	MWF 11:00am - 11:50am	IRB 0324	
	TuTh 3:00pm - 3:50pm	IRB 1207	Discussion
0408	Fawzi Emad	Seats (Total: 18)	
	MWF 11:00am - 11:50am	IRB 0324	
	TuTh 4:00pm - 4:50pm	IRB 1207	Discussion
0409	Fawzi Emad	Seats (Total: 32)	
	MWF 11:00am - 11:50am	IRB 0324	
	TuTh 11:00am - 11:50am	IRB 2207	Discussion
0410	Fawzi Emad	Seats (Total: 32)	
	MWF 11:00am - 11:50am	IRB 0324	
	TuTh 4:00pm - 4:50pm	IRB 2207	Discussion
FC01	Nelson Padua-Perez	Seats (Total: 120)	
	MW 6:00pm - 7:15pm	IRB 0324	
	Tu 6:00pm - 7:15pm	HJP 0226	Discussion
<i>Restricted to students in Freshmen Connection.</i>			

Prerequisite: Minimum grade of C- in CMSC131; or must have earned a score of 5 on the A Java AP exam; or must have earned a satisfactory score on the departmental placement exam. And minimum grade of C- in MATH140.

Introduction to use of computers to solve problems using software engineering principles. Design, build, test, and debug medium -size software systems and learn to use relevant tools. Use object-oriented methods to create effective and efficient problem solutions. Use and implement application programming interfaces (APIs). Programming done in Java.

0101	Nelson Padua-Perez MWF 1:00pm - 1:50pm MW 12:00pm - 12:50pm	Seats (Total: 34) IRB 0324 CSI 2118	Discussion
0102	Nelson Padua-Perez MWF 1:00pm - 1:50pm MW 8:00am - 8:50am	Seats (Total: 34) IRB 0324 CSI 1122	Discussion
0103	Nelson Padua-Perez MWF 1:00pm - 1:50pm MW 9:00am - 9:50am	Seats (Total: 34) IRB 0324 CSI 2118	Discussion
0104	Nelson Padua-Perez MWF 1:00pm - 1:50pm MW 12:00pm - 12:50pm	Seats (Total: 34) IRB 0324 CSI 3120	Discussion
0105	Nelson Padua-Perez MWF 1:00pm - 1:50pm MW 10:00am - 10:50am	Seats (Total: 34) IRB 0324 CSI 3120	Discussion
0106	Nelson Padua-Perez MWF 1:00pm - 1:50pm MW 11:00am - 11:50am	Seats (Total: 34) IRB 0324 CSI 3120	Discussion
0107	Nelson Padua-Perez MWF 1:00pm - 1:50pm MW 9:00am - 9:50am	Seats (Total: 34) IRB 0324 CSI 2107	Discussion
0108	Nelson Padua-Perez MWF 1:00pm - 1:50pm MW 8:00am - 8:50am	Seats (Total: 34) IRB 0324 CSI 2107	Discussion

0201	Pedram Sadeghian MWF 2:00pm - 2:50pm MW 1:00pm - 1:50pm	Seats (Total: 32) IRB 0324 CSI 2107	Discussion
0202	Pedram Sadeghian MWF 2:00pm - 2:50pm MW 12:00pm - 12:50pm	Seats (Total: 32) IRB 0324 CSI 2107	Discussion
0203	Pedram Sadeghian MWF 2:00pm - 2:50pm MW 9:00am - 9:50am	Seats (Total: 32) IRB 0324 CSI 1121	Discussion
0204	Pedram Sadeghian MWF 2:00pm - 2:50pm MW 8:00am - 8:50am	Seats (Total: 32) IRB 0324 CSI 1121	Discussion
0205	Pedram Sadeghian MWF 2:00pm - 2:50pm MW 1:00pm - 1:50pm	Seats (Total: 32) IRB 0324 CSI 2118	Discussion
0206	Pedram Sadeghian MWF 2:00pm - 2:50pm MW 11:00am - 11:50am	Seats (Total: 32) IRB 0324 CSI 2118	Discussion
0207	Pedram Sadeghian MWF 2:00pm - 2:50pm MW 10:00am - 10:50am	Seats (Total: 32) IRB 0324 CSI 2107	Discussion
0301	Pedram Sadeghian MWF 3:00pm - 3:50pm MW 8:00am - 8:50am	Seats (Total: 32) IRB 0324 CSI 3118	Discussion
0302	Pedram Sadeghian MWF 3:00pm - 3:50pm MW 9:00am - 9:50am	Seats (Total: 32) IRB 0324 CSI 3118	Discussion
0303	Pedram Sadeghian MWF 3:00pm - 3:50pm MW 10:00am - 10:50am	Seats (Total: 32) IRB 0324 CSI 2118	Discussion

0304	Pedram Sadeghian	Seats (Total: 32)	
	MWF 3:00pm - 3:50pm	IRB 0324	
	MW 2:00pm - 2:50pm	CSI 2107	Discussion
0305	Pedram Sadeghian	Seats (Total: 32)	
	MWF 3:00pm - 3:50pm	IRB 0324	
	MW 11:00am - 11:50am	CSI 2107	Discussion
0306	Pedram Sadeghian	Seats (Total: 32)	
	MWF 3:00pm - 3:50pm	IRB 0324	
	MW 1:00pm - 1:50pm	CSI 1122	Discussion
0307	Pedram Sadeghian	Seats (Total: 32)	
	MWF 3:00pm - 3:50pm	IRB 0324	
	MW 2:00pm - 2:50pm	CSI 3118	Discussion

CMSC216

Introduction to Computer Systems

Credits: 4

Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC132; and minimum grade of C- in MATH141. Restriction: Must be in a major within the CMNS-Computer Science department; or must be in Engineering: Computer program; or must be in the Computer Science Minor program.

Introduction to the interaction between user programs and the operating system/hardware. Major topics include C programming, introductory systems programming, and assembly language. Other concepts covered include UNIX, machine data representation, thread management, optimization, and virtual memory. Programming is done in the Linux Environment.

0101	Laurence Herman	Seats (Total: 36)	
	TuTh 11:00am - 12:15pm	IRB 0324	
	MW 12:00pm - 12:50pm	IRB 1207	Discussion
0102	Laurence Herman	Seats (Total: 36)	
	TuTh 11:00am - 12:15pm	IRB 0324	
	MW 10:00am - 10:50am	IRB 2107	Discussion
0103	Laurence Herman	Seats (Total: 36)	
	TuTh 11:00am - 12:15pm	IRB 0324	
	MW 9:00am - 9:50am	IRB 2207	Discussion

0104	Laurence Herman TuTh 11:00am - 12:15pm MW 11:00am - 11:50am	Seats (Total: 36) IRB 0324 IRB 1207	Discussion
0105	Laurence Herman TuTh 11:00am - 12:15pm MW 9:00am - 9:50am	Seats (Total: 36) IRB 0324 IRB 1207	Discussion
0106	Laurence Herman TuTh 11:00am - 12:15pm MW 2:00pm - 2:50pm	Seats (Total: 36) IRB 0324 IRB 1207	Discussion
0107	Laurence Herman TuTh 11:00am - 12:15pm MW 4:00pm - 4:50pm	Seats (Total: 36) IRB 0324 IRB 2107	Discussion
0108	Laurence Herman TuTh 11:00am - 12:15pm MW 2:00pm - 2:50pm	Seats (Total: 36) IRB 0324 IRB 2207	Discussion
0201	Laurence Herman TuTh 2:00pm - 3:15pm MW 3:00pm - 3:50pm	Seats (Total: 36) IRB 0324 IRB 2107	Discussion
0202	Laurence Herman TuTh 2:00pm - 3:15pm MW 1:00pm - 1:50pm	Seats (Total: 36) IRB 0324 IRB 2107	Discussion
0203	Laurence Herman TuTh 2:00pm - 3:15pm MW 8:00am - 8:50am	Seats (Total: 36) IRB 0324 IRB 2207	Discussion
0204	Laurence Herman TuTh 2:00pm - 3:15pm MW 5:00pm - 5:50pm	Seats (Total: 36) IRB 0324 IRB 1207	Discussion
0205	Laurence Herman TuTh 2:00pm - 3:15pm MW 12:00pm - 12:50pm	Seats (Total: 36) IRB 0324 IRB 2207	Discussion

0206	Laurence Herman	Seats (Total: 36)	
	TuTh 2:00pm - 3:15pm	IRB 0324	
	MW 4:00pm - 4:50pm	IRB 2207	Discussion
0207	Laurence Herman	Seats (Total: 36)	
	TuTh 2:00pm - 3:15pm	IRB 0324	
	MW 10:00am - 10:50am	IRB 1207	Discussion
0208	Laurence Herman	Seats (Total: 36)	
	TuTh 2:00pm - 3:15pm	IRB 0324	
	MW 5:00pm - 5:50pm	IRB 2107	Discussion
0301	A Shankar, Laurence Herman	Seats (Total: 37)	
	TuTh 3:30pm - 4:45pm	CSI 1115	
	MW 9:00am - 9:50am	IRB 2107	Discussion
0302	A Shankar, Laurence Herman	Seats (Total: 35)	
	TuTh 3:30pm - 4:45pm	CSI 1115	
	MW 11:00am - 11:50am	IRB 2107	Discussion
0303	A Shankar, Laurence Herman	Seats (Total: 32)	
	TuTh 3:30pm - 4:45pm	CSI 1115	
	MW 8:00am - 8:50am	IRB 2107	Discussion
0304	A Shankar, Laurence Herman	Seats (Total: 37)	
	TuTh 3:30pm - 4:45pm	CSI 1115	
	MW 1:00pm - 1:50pm	IRB 1207	Discussion

CMSC250

Discrete Structures

Credits: 4

Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC131; and minimum grade of C- in MATH141. Restriction: Must be in a major within the CMNS-Computer Science department; or must be in Engineering: Computer program; or must be in the Computer Science Minor program. Formerly: CMSC150.

Fundamental mathematical concepts related to computer science, including finite and infinite sets, relations, functions, and propositional logic. Introduction to other techniques, modeling and solving problems in computer science. Introduction to permutations, combinations, graphs, and trees with selected applications.

0101	Jason Filippou TuTh 3:30pm - 4:45pm MW 3:00pm - 3:50pm	Seats (Total: 34) IRB 0324 CSI 2118	Discussion
0102	Jason Filippou TuTh 3:30pm - 4:45pm MW 1:00pm - 1:50pm	Seats (Total: 34) IRB 0324 CSI 3120	Discussion
0103	Jason Filippou TuTh 3:30pm - 4:45pm MW 12:00pm - 12:50pm	Seats (Total: 34) IRB 0324 CSI 3118	Discussion
0104	Jason Filippou TuTh 3:30pm - 4:45pm MW 10:00am - 10:50am	Seats (Total: 34) IRB 0324 CSI 1122	Discussion
0105	Jason Filippou TuTh 3:30pm - 4:45pm MW 8:00am - 8:50am	Seats (Total: 34) IRB 0324 CSI 2120	Discussion
0106	Jason Filippou TuTh 3:30pm - 4:45pm MW 4:00pm - 4:50pm	Seats (Total: 34) IRB 0324 CSI 3118	Discussion
0201	Jason Filippou TuTh 12:30pm - 1:45pm MW 2:00pm - 2:50pm	Seats (Total: 34) IRB 0324 CSI 3120	Discussion
0202	Jason Filippou TuTh 12:30pm - 1:45pm MW 10:00am - 10:50am	Seats (Total: 34) IRB 0324 CSI 1121	Discussion
0203	Jason Filippou TuTh 12:30pm - 1:45pm MW 11:00am - 11:50am	Seats (Total: 34) IRB 0324 CSI 1121	Discussion
0204	Jason Filippou TuTh 12:30pm - 1:45pm MW 12:00pm - 12:50pm	Seats (Total: 34) IRB 0324 CSI 1122	Discussion

0205	Jason Filippou TuTh 12:30pm - 1:45pm MW 8:00am - 8:50am	Seats (Total: 32) IRB 0324 CSI 3120	Discussion
0206	Jason Filippou TuTh 12:30pm - 1:45pm MW 9:00am - 9:50am	Seats (Total: 32) IRB 0324 CSI 3120	Discussion
0207	Jason Filippou TuTh 12:30pm - 1:45pm MW 1:00pm - 1:50pm	Seats (Total: 34) IRB 0324 CSI 3118	Discussion
0301	Donald Perlis TuTh 2:00pm - 3:15pm MW 2:00pm - 2:50pm	Seats (Total: 36) ESJ 0202 CSI 1121	Discussion
0302	Donald Perlis TuTh 2:00pm - 3:15pm MW 9:00am - 9:50am	Seats (Total: 36) ESJ 0202 EGR 1104	Discussion
0303	Donald Perlis TuTh 2:00pm - 3:15pm MW 3:00pm - 3:50pm	Seats (Total: 36) ESJ 0202 CSI 2107	Discussion
0304	Donald Perlis TuTh 2:00pm - 3:15pm MW 11:00am - 11:50am	Seats (Total: 36) ESJ 0202 CSI 1122	Discussion
0305	Donald Perlis TuTh 2:00pm - 3:15pm MW 4:00pm - 4:50pm	Seats (Total: 36) ESJ 0202 CSI 2120	Discussion
0306	Donald Perlis TuTh 2:00pm - 3:15pm MW 5:00pm - 5:50pm	Seats (Total: 36) ESJ 0202 CSI 3120	Discussion

CMSC298A Special Topics in Computer Science

(Perm req)

Credits: 1-4 Grading Method: Sat-Fail

A course designed to allow a lower level student to pursue a specialized topic or project.

Contact department for information to register for this course.

CMSC320 Introduction to Data Science

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC216 and CMSC250. Restriction: Permission of CMNS-Computer Science department.

An introduction to the data science pipeline, i.e., the end-to-end process of going from unstructured, messy data to knowledge and actionable insights. Provides a broad overview of several topics including statistical data analysis, basic data mining and machine learning algorithms, large-scale data management, cloud computing, and information visualization.

0101	John Dickerson	Seats (Total: 298)
	TuTh 5:00pm - 6:15pm	IRB 0324

CMSC330 Organization of Programming Languages

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC250 and CMSC216. Restriction: Must be in a major within the CMNS-Computer Science department; or must be in the Computer Science Minor program; or must be in Engineering: Computer program.

A study of programming languages, including their syntax, semantics, and implementation. Several different models of languages are discussed, including dynamic, scripting (e.g., Ruby, Python) functional (e.g., OCaml, Haskell, Scheme), and memory safe systems programming (e.g., Rust). Explores language features such as formal syntax, scoping and binding of variables, higher-order programming, typing, and type polymorphism. Introduces finite automata, context free grammar, parsing, lambda calculus, and basics of security attacks and software security.

0101	Anwar Mamat	Seats (Total: 36)
	TuTh 5:00pm - 6:15pm	ESJ 0202
	F 12:00pm - 12:50pm	IRB 1207 Discussion
0102	Anwar Mamat	Seats (Total: 36)
	TuTh 5:00pm - 6:15pm	ESJ 0202
	F 1:00pm - 1:50pm	IRB 1207 Discussion
0103	Anwar Mamat	Seats (Total: 36)
	TuTh 5:00pm - 6:15pm	ESJ 0202
	F 2:00pm - 2:50pm	IRB 1207 Discussion
0104	Anwar Mamat	Seats (Total: 36)
	TuTh 5:00pm - 6:15pm	ESJ 0202
	F 3:00pm - 3:50pm	IRB 1207 Discussion

0105	Anwar Mamat TuTh 5:00pm - 6:15pm F 10:00am - 10:50am	Seats (Total: 36) ESJ 0202 IRB 2107	Discussion
0106	Anwar Mamat TuTh 5:00pm - 6:15pm F 4:00pm - 4:50pm	Seats (Total: 36) ESJ 0202 IRB 1207	Discussion
0107	Anwar Mamat TuTh 5:00pm - 6:15pm F 12:00pm - 12:50pm	Seats (Total: 36) ESJ 0202 IRB 2107	Discussion
0108	Anwar Mamat TuTh 5:00pm - 6:15pm F 1:00pm - 1:50pm	Seats (Total: 36) ESJ 0202 IRB 2107	Discussion
0109	Anwar Mamat TuTh 5:00pm - 6:15pm F 10:00am - 10:50am	Seats (Total: 36) ESJ 0202 CSI 2118	Discussion
0201	Roger Eastman TuTh 9:30am - 10:45am F 2:00pm - 2:50pm	Seats (Total: 32) IRB 0324 IRB 2207	Discussion
0202	Roger Eastman TuTh 9:30am - 10:45am F 3:00pm - 3:50pm	Seats (Total: 32) IRB 0324 IRB 2207	Discussion
0203	Roger Eastman TuTh 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 32) IRB 0324 IRB 1207	Discussion
0204	Roger Eastman TuTh 9:30am - 10:45am F 11:00am - 11:50am	Seats (Total: 32) IRB 0324 IRB 1207	Discussion
0205	Roger Eastman TuTh 9:30am - 10:45am F 2:00pm - 2:50pm	Seats (Total: 32) IRB 0324 IRB 2107	Discussion

0206	Roger Eastman	Seats (Total: 32)	
	TuTh 9:30am - 10:45am	IRB 0324	
	F 3:00pm - 3:50pm	IRB 2107	Discussion
0207	Roger Eastman	Seats (Total: 32)	
	TuTh 9:30am - 10:45am	IRB 0324	
	F 4:00pm - 4:50pm	IRB 2107	Discussion
0208	Roger Eastman	Seats (Total: 32)	
	TuTh 9:30am - 10:45am	IRB 0324	
	F 11:00am - 11:50am	IRB 2107	Discussion
0209	Roger Eastman	Seats (Total: 32)	
	TuTh 9:30am - 10:45am	IRB 0324	
	F 10:00am - 10:50am	IRB 2207	Discussion

CMSC351

Algorithms

Credits: 3

Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC250 and CMSC216. Restriction: Must be in a major within the CMNS-Computer Science department; or must be in Engineering: Computer program; or must be in the Computer Science Minor program. Credit only granted for: CMSC251 or CMSC351. Additional information: CMSC351 may not count as one of the required upper level CMSC courses for students who are required to have 24 upper level CMSC credits for graduation, i.e. for students who became computer science majors prior to Fall, 2002.

A systematic study of the complexity of some elementary algorithms related to sorting, graphs and trees, and combinatorics. Algorithms are analyzed using mathematical techniques to solve recurrences and summations.

0101	Mohammad Nayeem Teli	Seats (Total: 260)	
	MWF 10:00am - 10:50am	IRB 0324	
0201	Clyde Kruskal	Seats (Total: 260)	
	MWF 4:00pm - 4:50pm	IRB 0324	
0301	Clyde Kruskal	Seats (Total: 130)	
	TuTh 11:00am - 12:15pm	CSI 1115	

CMSC388D

Special Topics in Computer Science; 2D Game Engine Design

(Perm req)

Credits: 2

Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science.

Prerequisites: Minimum grade of C- in CMSC250 and CMSC216.

0101	David Mount	Seats (Total: 30)
	F 1:00pm - 2:50pm	CSI 2120

CMSC388J Special Topics in Computer Science; Building Secure Web Applications with Python and Flask

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science.

Prerequisites: Minimum grade of C- in CMSC250 and CMSC216. Students are introduced to building secure, full-stack web applications with Python and Flask. Different types of security vulnerabilities and best practices to patch in students own applications will be examined.

0101	Michael Marsh	Seats (Total: 38)
	F 12:00pm - 12:50pm	CSI 2118

CMSC388L Special Topics in Computer Science; Readings in HCI Research

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science.

Prerequisites: Minimum grade of C- in CMSC250 and CMSC216. Students are introduced to research from the premier international conference of Human Computer Interaction, ACM CHI.

0101	Evan Golub	Seats (Total: 30)
	F 11:00am - 11:50am	EGR 0135

CMSC388M Special Topics in Computer Science; Introduction to Mobile XR

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science.

Prerequisites: Minimum grade of C- in CMSC250 and CMSC216 Students will explore the basics of smartphone-based augmented and virtual reality. Focus is placed on development of XR apps with Unity as well as the hardware, mathematics, physics, algorithms, best practices, and principles that make immersive experiences possible.

0101	Roger Eastman	Seats (Total: 30)
	F 2:00pm - 2:50pm	CSI 2118

CMSC389K Special Topics in Computer Science; Full-stack Web Development with Node.js

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisites: Minimum grade of C- in CMSC250 and CMSC216.

0101	John Dickerson	Seats (Total: 30)
	F 11:00am - 11:50am	CSI 2120
0201	John Dickerson	Seats (Total: 30)
	F 12:00pm - 12:50pm	CSI 2120

CMSC389N Special Topics in Computer Science; Introduction to PHP and Javascript

(Perm req)

Credits: 3 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisite: Minimum grade of C- in CMSC250 and CMSC216; and permission of CMNS-Computer Science department.

0101	Ilchul Yoon	Seats (Total: 120)
	TuTh 12:30pm - 1:45pm	CSI 1115

CMSC389O Special Topics in Computer Science; The Coding Interview

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisites: Minimum grade of C- in CMSC250 and CMSC216.

0101	Thomas Goldstein	Seats (Total: 30)
	F 12:00pm - 12:50pm	ESJ B0320
0201	Thomas Goldstein	Seats (Total: 30)
	F 1:00pm - 1:50pm	ESJ B0320

0301	Thomas Goldstein	Seats (Total: 30)
	F 2:00pm - 2:50pm	ESJ B0320

CMSC389R Special Topics in Computer Science; Introduction to Ethical Hacking

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Prerequisites: Minimum grade of C- in CMSC250 and CMSC216.

0101	David Levin	Seats (Total: 30)
	F 2:00pm - 2:50pm	CSI 3120

CMSC389W Special Topics in Computer Science; Visualization through Mathematica

(Perm req)

Credits: 1 Grading Method: Regular

Seminar courses that allow students to pursue new and emerging areas of Computer Science; course may be used as electives for the undergraduate degree and minor.

Jointly offered with MATH299M. Credit only granted for CMSC389W or MATH2 99M. Prerequisites: CMSC216 and CMSC250 with a grade of C- or better; and permission of the Computer Science department.

0101	Jason Filippou	Seats (Total: 30)
	F 2:00pm - 2:50pm	EGR 0135

CMSC390 Honors Paper

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be admitted to the Computer Science Honors Program.

Special study or research directed toward preparation of honors paper.

Contact department for information to register for this course.

CMSC396H Computer Science Honors Seminar

(Perm req)

Credits: 1 Grading Method: Regular

Prerequisite: Must have admission into Computer Science Departmental Honors Program. Restriction: Permission of CMNS-Computer Science department. Credit only granted for: CMSC297 or CMSC396. Formerly: CMSC297.

Overview of computer science research activities, techniques, and tools. Diverse research areas will be covered, including systems, networks, artificial intelligence, human-computer interaction, software engineering, graphics, vision, and theory.

0101	David Levin	Seats (Total: 32)
	W 1:00pm - 1:50pm	EGR 2116

CMSC411 Computer Systems Architecture

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330; or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program. Restriction: Permission of CMNS-Computer Science department. Credit only granted for: ENEE446 or CMSC411.

Input/output processors and techniques. Intra-system communication, buses, caches. Addressing and memory hierarchies. Microprogramming, parallelism, and pipelining.

Students are required to take on-campus exams on the following dates: Thursdays, Oct. 10 and Nov. 21, 5 p.m.- 6:15 p.m. in HJP 0226.

0101	Michelle Hugue	Seats (Total: 175)
	Class time/details on ELMs	ONLINE

CMSC412 Operating Systems

(Perm req)

Credits: 4 Grading Method: Regular CORE: CS

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; and 1 course with a minimum grade of C- from (CMSC414, CMSC417, CMSC420, CMSC430, CMSC433, CMSC435, ENEE440, ENEE457). Restriction: Permission of CMNS-Computer Science department; or must be in one of the following programs (Computer Science (Master's); Computer Science (Doctoral)). Credit only granted for: CMSC412 or ENEE447.

A hands-on introduction to operating systems, including topics in: multiprogramming, communication and synchronization, memory management, IO subsystems, and resource scheduling policies. The laboratory component consists of constructing a small kernel, including functions for device IO, multi-tasking, and memory management.

0101	Ashok Agrawala	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	CSI 2117
	MW 12:00pm - 12:50pm	CSI 1121 Discussion

0102	Ashok Agrawala	Seats (Total: 40)	
	TuTh 12:30pm - 1:45pm	CSI 2117	
	MW 1:00pm - 1:50pm	CSI 1121	Discussion

CMSC414 Computer and Network Security

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program. Restriction: Permission of CMNS-Computer Science department. Credit only granted for: CMSC414, ENEE459C, or ENEE457.

An introduction to the topic of security in the context of computer systems and networks. Identify, analyze, and solve network-related security problems in computer systems. Fundamentals of number theory, authentication, and encryption technologies, as well as the practical problems that have to be solved in order to make those technologies workable in a networked environment, particularly in the wide-area Internet environment.

0101	Michael Marsh	Seats (Total: 90)	
	MW 2:00pm - 3:15pm	IRB 1116	
0201	Michael Marsh	Seats (Total: 90)	
	MW 3:30pm - 4:45pm	IRB 1116	

CMSC417 Computer Networks

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC351 and CMSC330; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Computer networks and architectures. The OSI model including discussion and examples of various network layers. A general introduction to existing network protocols. Communication protocol specification, analysis, and testing.

0101	Samrat Bhattacharjee	Seats (Total: 88)	
	TuTh 2:00pm - 3:15pm	CSI 1115	

CMSC420 Advanced Data Structures

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC351 and CMSC330; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Description, properties, and storage allocation functions of data structures including balanced binary trees, B-Trees, hash tables, skiplists, tries, KD-Trees and Quadrees. Algorithms for manipulating structures. Applications from areas such as String Processing, Computer Graphics, Information Retrieval, Computer Networks, Computer Vision, and Operating Systems.

0101	Jason Filippou MW 3:30pm - 4:45pm	Seats (Total: 144) CSI 1115
0201	David Mount TuTh 11:00am - 12:15pm	Seats (Total: 140) ESJ 1224
0301	Hanan Samet TuTh 9:30am - 10:45am	Seats (Total: 50) CSI 1122

CMSC421 Introduction to Artificial Intelligence

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC351 and CMSC330; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Introduces a range of ideas and methods in AI, varying semester to semester but chosen largely from: automated heuristic search, planning, games, knowledge representation, logical and statistical inference, learning, natural language processing, vision, robotics, cognitive modeling, and intelligent agents. Programming projects will help students obtain a hands-on feel for various topics.

0101	Dana Nau MW 3:30pm - 4:45pm	Seats (Total: 95) IRB 0318
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CMSC422 Introduction to Machine Learning

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC320, CMSC330, and CMSC351; and 1 course with a minimum grade of C- from (MATH240, MATH461); and permission of CMNS-Computer Science department.

Machine Learning studies representations and algorithms that allow machines to improve their performance on a task from experience. This is a broad overview of existing methods for machine learning and an introduction to adaptive systems in general. Emphasis is given to practical aspects of machine learning and data mining.

0101	David Jacobs	Seats (Total: 100)
	MW 2:00pm - 3:15pm	CSI 1115
0201	Ramani Duraiswami	Seats (Total: 95)
	TuTh 9:30am - 10:45am	IRB 0318

CMSC423 Bioinformatic Algorithms, Databases, and Tools

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC351 and CMSC330; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

An introduction to the main algorithms, databases, and tools used in bioinformatics. Topics may include assembly and analysis of genome sequences, reconstructing evolutionary histories, predicting protein structure, and clustering of biological data. Use of scripting languages to perform analysis tasks on biological data. No prior knowledge of biology is assumed.

0101	Mihai Pop	Seats (Total: 96)
	TuTh 11:00am - 12:15pm	IRB 1116

CMSC424 Database Design

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS

Prerequisite: Minimum grade of C- in CMSC351 and CMSC330; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Students are introduced to database systems and motivates the database approach as a mechanism for modeling the real world. An in-depth coverage of the relational model, logical database design, query languages, and other database concepts including query optimization, concurrency control; transaction management, and log based crash recovery. Distributed and Web database architectures are also discussed.

0101	Peter Keleher	Seats (Total: 155)
	MW 2:00pm - 3:15pm	ESJ 0224

CMSC425**Game Programming**

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC420.

An introduction to the principles and practice of computer game programming and design. This includes an introduction to game hardware and systems, the principles of game design, object and terrain modeling, game physics, artificial intelligence for games, networking for games, rendering and animation, and aural rendering. Course topics are reinforced through the design and implementation of a working computer game.

0101	Roger Eastman	Seats (Total: 85)
	TuTh 12:30pm - 1:45pm	IRB 1116

CMSC426**Computer Vision**

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program. Restriction: Permission of CMNS-Computer Science department.

An introduction to basic concepts and techniques in computervision. This includes low-level operations such as image filtering and edge detection, 3D reconstruction of scenes using stereo and structure from motion, and object detection, recognition and classification.

0101	John Aloimonos	Seats (Total: 85)
	TuTh 12:30pm - 1:45pm	IRB 0318
0201	Mohammad Nayeem Teli	Seats (Total: 47)
	TuTh 11:00am - 12:15pm	CSI 1121

CMSC427**Computer Graphics**

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: MATH240; and minimum grade of C- in CMSC420; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

An introduction to 3D computer graphics, focusing on the underlying building blocks and algorithms for applications such as 3D computer games, and augmented and virtual reality (AR/VR). Covers the basics of 3D image generation and 3D modeling, with an emphasis on interactive applications. Discusses the representation of 3D geometry, 3D transformations, projections, rasterization, basics of color spaces, texturing and lighting models, as well as programming of modern Graphics Processing Units (GPUs). Includes programming projects where students build their own 3D rendering engine step-by-step.

0101	Matthias Zwicker	Seats (Total: 47)
	TuTh 2:00pm - 3:15pm	CSI 1122

CMSC430 Introduction to Compilers

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Topics include lexical analysis, parsing, intermediate representations, program analysis, optimization, and code generation.

0101	David Van Horn	Seats (Total: 87)
	TuTh 2:00pm - 3:15pm	CSI 2117

CMSC433 Programming Language Technologies and Paradigms

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330; or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program. Restriction: Permission of CMNS-Computer Science department.

Programming language technologies (e.g., object-oriented programming), their implementations and use in software design and implementation.

0101	Michael Marsh, Anwar Mamat	Seats (Total: 155)
	TuTh 3:30pm - 4:45pm	ESJ 0224
0201	Anwar Mamat, Michael Marsh	Seats (Total: 53)
	TuTh 3:30pm - 4:45pm	IRB 2107

CMSC434 Introduction to Human-Computer Interaction

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Assess usability by quantitative and qualitative methods. Conduct task analyses, usability tests, expert reviews, and continuing assessments of working products by interviews, surveys, and logging. Apply design processes and guidelines to develop professional quality user interfaces. Build low-fidelity paper mockups, and a high-fidelity prototype using contemporary tools such as graphic editors and a graphical programming environment (eg: Visual Basic, Java).

0101	Huaishu Peng	Seats (Total: 96)
	TuTh 9:30am - 10:45am	IRB 1116

CMSC435

Software Engineering

(Perm req)

Credits: 3

Grading Method: Regular

CORE: CS

Prerequisite: 1 course with a minimum grade of C- from (CMSC412, CMSC417, CMSC420, CMSC430, CMSC433); and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

State-of-the-art techniques in software design and development. Laboratory experience in applying the techniques covered. Structured design, structured programming, top-down design and development, segmentation and modularization techniques, iterative enhancement, design and code inspection techniques, correctness, and chief-programmer teams. The development of a large software project.

0101	James Purtilo	Seats (Total: 48)
	TuTh 2:00pm - 3:15pm	CSI 1121
0201	Garrett Vanhoy	Seats (Total: 48)
	TuTh 9:30am - 10:45am	CSI 1121

CMSC436

Programming Handheld Systems

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC330 and CMSC351; or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program. Restriction: Permission of CMNS-Computer Science department.

Fundamental principles and concepts that underlie the programming of handheld systems, such as mobile phones, personal digital assistants, and tablet computers. Particular emphasis will be placed on concepts such as limited display size, power, memory and CPU speed; and new input modalities, where handheld systems differ substantially from non-handheld systems, and thus require special programming tools and approaches. Students will apply these concepts and principles in the context of an existing handset programming platform.

0101	Adam Porter	Seats (Total: 155)
	TuTh 11:00am - 12:15pm	ESJ 2208

CMSC451 Design and Analysis of Computer Algorithms

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC351; and permission of CMNS-Computer Science department. Or must be in the (Computer Science (Doctoral), Computer Science (Master's)) program.

Fundamental techniques for designing efficient computer algorithms, proving their correctness, and analyzing their complexity. General topics include graph algorithms, basic algorithm design paradigms (such as greedy algorithms, divide-and-conquer, and dynamic programming), network flows, NP-completeness, and other selected topics in algorithms.

0101	Andrew Childs	Seats (Total: 95)
	TuTh 2:00pm - 3:15pm	IRB 0318
0201	Andrew Childs	Seats (Total: 95)
	TuTh 3:30pm - 4:45pm	IRB 0318

CMSC456 Cryptography

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: (CMSC106, CMSC131, or ENEE150; or equivalent programming experience); and (2 courses from (CMSC330, CMSC351, ENEE324, or ENEE380); or any one of these courses and a 400-level MATH course, or two 400-level MATH courses). Or permission of instructor. Also offered as: MATH456, ENEE456. Credit only granted for: MATH456, CMSC456, or ENEE456.

The theory, application, and implementation of mathematical techniques used to secure modern communications. Topics include symmetric and public-key encryption, message integrity, hash functions, block-cipher design and analysis, number theory, and digital signatures.

0101	Lawrence Washington	Seats (Total: 78)
	TuTh 2:00pm - 3:15pm	CSI 3117

0201	William Gasarch	Seats (Total: 95)
	MW 2:00pm - 3:15pm	IRB 0318

CMSC460

Computational Methods

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461); and 1 course with a minimum grade of C- from (MATH241, MATH340); and 1 course with a minimum grade of C- from (CMSC106, CMSC131); and minimum grade of C- in MATH246. Also offered as: AMSC460. Credit only granted for: AMSC460, AMSC466, CMSC460, or CMSC466.

Basic computational methods for interpolation, least squares, approximation, numerical quadrature, numerical solution of polynomial and transcendental equations, systems of linear equations and initial value problems for ordinary differential equations. Emphasis on methods and their computational properties rather than their analytic aspects. Intended primarily for students in the physical and engineering sciences.

0101	Akwum Onwunta	Seats (Total: 29)
	MWF 9:00am - 9:50am	EGR 0135
0201	Ruiwen Shu	Seats (Total: 29)
	TuTh 11:00am - 12:15pm	EGR 0135
0301	Stefan Doboszczak	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	MTH 0401
0401	Ruiwen Shu	Seats (Total: 29)
	TuTh 3:30pm - 4:45pm	EGR 0135

CMSC466

Introduction to Numerical Analysis I

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461); and 1 course with a minimum grade of C- from (MATH241, MATH340); and 1 course with a minimum grade of C- from (CMSC106, CMSC131); and minimum grade of C- in MATH410. Also offered as: AMSC466. Credit only granted for: AMSC460, CMSC460, AMSC466, or CMSC466.

Floating point computations, direct methods for linear systems, interpolation, solution of nonlinear equations.

0101	Eitan Tadmor	Seats (Total: 32)
	TuTh 2:00pm - 3:15pm	CSI 4122

CMSC470 Introduction to Natural Language Processing

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in CMSC320, CMSC330, and CMSC351; and 1 course with a minimum grade of C- from (MATH240, MATH461). Restriction: Permission of CMNS-Computer Science department.

Introduction to fundamental techniques for automatically processing and generating natural language with computers. Machine learning techniques, models, and algorithms that enable computers to deal with the ambiguity and implicit structure of natural language. Application of these techniques in a series of assignments designed to address a core application such as question answering or machine translation.

Introduction to fundamental techniques for automatically processing and generating natural language with computers. Machine learning techniques, models, and algorithms that enable computers to deal with the ambiguity and implicit structure of natural language. Application of these techniques in a series of assignments designed to address a core application such as question answering or machine translation.

0101	Marine Carpuat	Seats (Total: 40)
	MW 3:30pm - 4:45pm	EGR 1104

CMSC475 Combinatorics and Graph Theory

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461); and 1 course with a minimum grade of C- from (MATH241, MATH340). And permission of CMNS-Computer Science department; or permission of CMNS-Mathematics department. Cross-listed with MATH475 .

General enumeration methods, difference equations, generating functions. Elements of graph theory, matrix representations of graphs, applications of graph theory to transport networks, matching theory and graphical algorithms.

Credit only granted for MATH475 or CMSC475.

0101	Wiseley Wong	Seats (Total: 30)
	MWF 11:00am - 11:50am	MTH 0303

CMSC498A Selected Topics in Computer Science

(Perm req)

Credits: 1-3 Grading Method: Regular

An individualized course designed to allow a student or students to pursue a selected topic not taught as a part of the regular course offerings under the supervision of a Computer Science faculty member. In addition, courses dealing with topics of special interest and/or new emerging areas of computer science will be offered with this number. Selected topics courses will be structured very much like a regular course with homework, project and exams. Credit according to work completed

Contact department for information to register for this course.

CMSC498M Selected Topics in Computer Science; Machine Learning

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

An individualized course designed to allow a student or students to pursue a selected topic not taught as a part of the regular course offerings under the supervision of a Computer Science faculty member. In addition, courses dealing with topics of special interest and/or new emerging areas of computer science will be offered with this number. Selected topics courses will be structured very much like a regular course with homework, project and exams. Credit according to work completed

Prerequisite: ENEE324 or STAT400, Programming skills in Matlab, C+, or Python. Students taking the course as CMSC498M must have completed CMSC330 and CMSC351 with a minimum grade of C-. A broad introduction to machine learning and statistical pattern recognition. Topics include: Supervised learning (Bayesian learning and classifier, parametric/non-parametric learning, discriminant functions, support vector machines, neural networks, deep learning networks); Unsupervised learning (clustering, dimensionality reduction, autoencoders). The course will also discuss recent applications of machine learning, such as computer vision, data mining, autonomous navigation, and speech recognition.

0101	Min Wu	Seats (Total: 8)
	MW 12:30pm - 1:45pm	CSI 3117

CMSC498X Selected Topics in Computer Science; Introduction to Wireless Communications and Software-Defined Radio

(Perm req)

Credits: 3

Grading Method: Regular

An individualized course designed to allow a student or students to pursue a selected topic not taught as a part of the regular course offerings under the supervision of a Computer Science faculty member. In addition, courses dealing with topics of special interest and/or new emerging areas of computer science will be offered with this number. Selected topics courses will be structured very much like a regular course with homework, project and exams. Credit according to work completed

Prerequisite: One course with a minimum grade of C- from (CMSC411, CMSC412, CMSC412, CMSC414, CMSC417, CMSC433, CMSC435, CMSC456); and must not be a double major in Electrical Engineering.

0101	Marc Lichtman	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	CSI 3118

CMSC499A Independent Undergraduate Research

(Perm req)

Credits: 1-3 Grading Method: Regular

Students are provided with an opportunity to participate in a computer science research project under the guidance of a faculty advisor. Format varies. Students and supervising faculty member will agree to a research plan which must be approved by the department. As part of each research plan, students should produce a final paper delineating their contribution to the field.

Contact department for information to register for this course.

CMSC624 Database System Architecture and Implementation

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: CMSC424; or students who have taken courses with comparable content may contact the department. Credit only granted for: CMSC624 or CMSC828N. Formerly: CMSC828N.

In-depth overview of database architectures--both the mainstream traditional architecture and more modern architectures that are especially prevalent in cloud implementations. Topics include different architectural choices for different application spaces and the tradeoffs inherent in choices and building different parts of database systems.

0101	Daniel Abadi	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	CSI 2107

CMSC631 Program Analysis and Understanding

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: CMSC330; or students who have taken courses with comparable content may contact the department; or permission of instructor.

Techniques for static analysis of source code and modern programming paradigms. Analysis techniques: data flow analysis, program dependence graphs, program slicing, abstract interpretation. The meaning of programs: denotational semantics, partial evaluation. Advanced treatment of abstraction mechanisms: polymorphic types, operation overloading, inheritance, object-oriented programming and ML-like programming languages.

0101	Leonidas Lampropoulos	Seats (Total: 32)
	TuTh 2:00pm - 3:15pm	IRB 2107

CMSC657 Introduction to Quantum Information Processing

Credits: 3

Grading Method: Regular

Prerequisite: Familiarity with complex numbers and basic concepts in linear algebra (e.g., eigenvalues, eigenvectors, Hermitian and unitary matrices) is required. Credit only granted for: CMSC657 or CMSC858K. Formerly: CMSC858K. Additional information: Previous background in quantum mechanics or theory of computation is not required.

An introduction to the field of quantum information processing. Students will be prepared to pursue further study in quantum computing, quantum information theory, and related areas.

0101	Xiaodi Wu	Seats (Total: 50)
	TuTh 12:30pm - 1:45pm	CSI 1121

CMSC660

Scientific Computing I

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have knowledge of C or Fortran. And CMSC466, AMSC466, AMSC460, or CMSC460; or (must have knowledge of basic numerical analysis (linear equations, nonlinear equations, integration, interpolation); and permission of instructor). Cross-listed with AMSC660. Credit only granted for: AMSC660 or CMSC660.

Monte Carlo simulation, numerical linear algebra, nonlinear systems and continuation method, optimization, ordinary differential equations. Fundamental techniques in scientific computation with an introduction to the theory and software for each topic.

0101	Lise-Marie Imbert-Gerard	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	MTH B0421

CMSC663

Advanced Scientific Computing I

Credits: 3 Grading Method: Regular

Prerequisite: AMSC660 or CMSC660; and (AMSC661 or CMSC661). Restriction: Permission of instructor. Cross-listed with AMSC663. Credit only granted for: AMSC663 or CMSC663.

In the sequence Advanced Scientific Computing I & Advanced Scientific Computing II, (AMSC663/CMSC663 and AMSC664/CMSC664, respectively) students work on a year-long individual project to develop software for a scientific task in a high performance computing environment. Lectures will be given on available computational environments, code development, implementation of parallel algorithms.

0101	Maria Cameron, Jacob Bedrossian	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	PHY 4222

CMSC666

Numerical Analysis I

Credits: 3 Grading Method: Regular, Audit

Prerequisite: CMSC466 or AMSC466; and MATH410. Cross-listed with AMSC66 6. Credit only granted for: AMSC666 or CMSC666.

Interpolation and approximation, numerical integration, solution algorithms for nonlinear systems of equations, numerical optimization.

Click here for more course information.

0101	Ricardo Nochetto	Seats (Total: 27)
	TuTh 5:00pm - 6:15pm	MTH 0303

CMSC714 High Performance Computing Systems

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: CMSC411 and CMSC412; or permission of instructor.

Selected topics in high-performance systems, including contemporary architectures, interconnection topologies, shared memory and message-passing systems, multi-threaded kernels, latency avoidance and hiding techniques, methods for data and workload partitioning performance profiling, debugging.

0101	Abhinav Bhatele	Seats (Total: 40)
	TuTh 9:30am - 10:45am	CHE 2136

CMSC723 Computational Linguistics I

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: CMSC421 or CMSC422; or students who have taken courses with comparable content may contact the department; or permission of instructor. Cross-listed with: INST735, LING723. Credit only granted for: CMSC723, LING723, or INST735. Additional information: CMSC students may only receive PhD Comp. credit for CMSC723 or CMSC823, not both.

Fundamental methods in natural language processing. Topics include: finite-state methods, context-free and extended context-free models of syntax; parsing and semantics interpretation; n-gram and Hidden Markov models, part-of-speech tagging; natural language applications such as machine translation, automatic summarization, and question answering.

0101	Hal Daume	Seats (Total: 90)
	TuTh 3:30pm - 4:45pm	IRB 1116

Geographical Information Systems and Spatial Databases

Prerequisite: CMSC424 and CMSC420; or permission of instructor.

Topics in geographic information systems and spatial databases. Integrates related results from databases, cartography, geography, computer graphics, file access methods, computational geometry, image processing, data structures, and programming languages. Topics include: cartographic modeling, principles of cartography, methods from computational geometry, principles of spatial databases, access methods, and spatial data structures. The architecture of some existing spatial databases and geographic information systems will be examined in greater detail.

0101	Hanan Samet	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	CSI 2118

Machine Learning

Prerequisite: CMSC421 or CMSC422; or students who have taken courses with comparable content may contact the department; or permission of instructor.

An introduction to modern statistical data analysis using machine learning techniques. The course quickly surveys elementary statistical models (decision trees, nearest neighbors and linear regression) and moves on to more complex algorithms such as support vector machines, boosting, neural networks, structured prediction, apprenticeship learning, online learning, bandits, recommender systems and reinforcement learning. Throughout an emphasis is placed on mathematical rigor.

Prerequisite: CMSC421; or students who have taken courses with comparable content may contact the department; or permission of instructor.

0101	Soheil Feizi	Seats (Total: 100)
	TuTh 11:00am - 12:15pm	IRB 0318

Advanced Linear Numerical Analysis

Prerequisite: AMSC666 or CMSC666; or permission of instructor. Also offered as: AMSC763. Credit only granted for: AMSC600, AMSC763, CMSC760, or CMSC763. Formerly: AMSC600 and CMSC760.

Advanced topics in numerical linear algebra, such as dense eigenvalue problems, sparse elimination, iterative methods, and other topics.

0101	Howard Elman	Seats (Total: 30)
	MW 3:30pm - 4:45pm	CSI 1122

CMSC798
Graduate Seminar in Computer Science

(Perm req)

Credits: 1-3 Grading Method: Regular

Contact department for information to register for this course.
CMSC798E
Graduate Seminar in Computer Science

Credits: 1 Grading Method: Regular

0101	Ramani Duraiswami	Seats (Total: 60)
	F 11:00am - 11:50am	IRB 0318

CMSC799
Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.
CMSC818B
Advanced Topics in Computer Systems; Decision-Making for Robotics

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of computer systems to suit the interest and background of students.

Restricted to Computer Science students (CMSC) or permission of instructor.

0101	Pratap Tokekar	Seats (Total: 35)
	MW 2:00pm - 3:15pm	ATL 1114

CMSC818E
Advanced Topics in Computer Systems; Distributed and Cloud-Based Storage Systems

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the literature of computer systems to suit the interest and background of students.

0101	Peter Keleher	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	CSI 3118

CMSC8180 Advanced Topics in Computer Systems; Computer and Network Security

Credits: 3 Grading Method: Regular,
 Audit

Advanced topics selected by the faculty from the literature of computer systems to suit the interest and background of students.

0101	David Levin	Seats (Total: 45)
	TuTh 3:30pm - 4:45pm	CSI 3117

CMSC818W Advanced Topics in Computer Systems; Wireless and Mobile Systems for the IoT

Credits: 3 Grading Method: Regular,
 Audit

Advanced topics selected by the faculty from the literature of computer systems to suit the interest and background of students.

0101	Nirupam Roy	Seats (Total: 30)
	MW 2:00pm - 3:15pm	CSI 1122

CMSC828C Advanced Topics in Information Processing; Statistical Pattern Recognition

Credits: 3 Grading Method: Regular,
 Audit

Advanced topics selected by the faculty from the literature of information processing to suit the interest and background of students.

0101	Ramalingam Chellappa	Seats (Total: 85)
	MW 11:00am - 12:15pm	CSI 1115

CMSC828D Advanced Topics in Information Processing; Interactive Data Analytics

Credits: 3 Grading Method: Regular,
 Audit

Advanced topics selected by the faculty from the literature of information processing to suit the interest and background of students.

0101	Leilani Battle	Seats (Total: 45)
	TuTh 12:30pm - 1:45pm	IRB 2107

Advanced Topics in Information Processing; Advanced Techniques in Visual Learning and Recognition

Advanced topics selected by the faculty from the literature of information processing to suit the interest and background of students.

0101	Abhinav Shrivastava	Seats (Total: 60)
	TuTh 12:30pm - 1:45pm	ATL 1113

Advanced Topics in Information Processing; Computational and Mathematical Analysis of Biological Networks across Scales

Advanced topics selected by the faculty from the literature of information processing to suit the interest and background of students.

0101	Hector Corrada Bravo	Seats (Total: 25)
	MW 3:30pm - 4:45pm	CSI 1121

Advanced Topics in Information Processing; Nature-Inspired Computing

Advanced topics selected by the faculty from the literature of information processing to suit the interest and background of students.

0101	James Reggia	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	CSI 1122

Advanced Topics in Information Processing; Physically-based Modeling, Simulation, and Animation

Advanced topics selected by the faculty from the literature of information processing to suit the interest and background of students.

This course covers computational methods for modeling of motions in the physical and virtual world. We will discuss various considerations and trade offs used in designing simulation methodologies (e.g. time, space, robustness, and generality). These include data structures, algorithms, computational methods and simulation techniques, their complexity and implementation. The lectures will also cover some applications of physically-based modeling and simulation, such as Computer Animation, VR, Medical Simulation, Special Effects, Computer Games, Robotics, and Bioinformatics.

0101	Ming Lin	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	CSI 1121

CMSC828Y Advanced Topics in Information Processing

Credits: 1-3 Grading Method: Regular,
Audit

Advanced topics selected by the faculty from the literature of information processing to suit the interest and background of students.

0101	Joseph JaJa	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	AJC 2119

CMSC828Z Advanced Topics in Information Processing; Information Retrieval Systems

Credits: 3 Grading Method: Regular,
Audit

Advanced topics selected by the faculty from the literature of information processing to suit the interest and background of students.

0101	Petra Galuscakova	Seats (Total: 30)
	Th 6:00pm - 8:45pm	TYD 1118

CMSC838X Advanced Topics in Programming Languages; Personal Health Informatics & Visualization

Credits: 3 Grading Method: Regular,
Audit

Advanced topics selected by faculty from the literature of programming languages to suit the interest and background of students.

Jointly offered with INST682. Credit only granted for INST682 or CMSC838 X.

0101	Eun Kyoung Choe	Seats (Total: 30)
	Tu 2:00pm - 4:45pm	HBK 2119

Advanced Topics in Theory of Computing; Algorithms, Data Structures and Inference fo High-Throughput Genomics

Credits: 3 Grading Method: Regular,
Audit

Advanced topics selected by the faculty from the literature of theory of computing to suit the interest and background of students.

0101	Robert Patro	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	ATL 2416

CMSC898

Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular, Satisfail

Advanced topics selected by the faculty from the literature of applications of computer science to suit the interest and background of students.

Contact department for information to register for this course.

CMSC899

Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

COMM

Communication

Fall 2019

COMM107

Oral Communication: Principles and Practices

Credits: 3	Grading Method: Regular, Pass-Fail	General Education: FSOC
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Credit only granted for: COMM107, COMM200, ENES143, INAG110, JOUR130 or THET285.

A study of and practice in oral communication, including principles of interviewing, group discussion, listening, informative briefings, and persuasive speeches.

Attendance on the first day of classes is mandatory.

0101	Aaron Swanlek	Seats (Total: 19)
	MWF 8:00am - 8:50am	SKN 0104
0201	Jonathan Leach	Seats (Total: 19)
	MWF 8:00am - 8:50am	SKN 1112

0301	Shelby Sturm MWF 8:00am - 8:50am	Seats (Total: 19) SKN 1115
0401	Ashley Aragon MWF 8:00am - 8:50am	Seats (Total: 19) PLS 1176
1101	Katlin Gray MWF 9:00am - 9:50am	Seats (Total: 19) SKN 0104
1201	Jonathan Leach MWF 9:00am - 9:50am	Seats (Total: 19) SKN 1112
1301	Shelby Sturm MWF 9:00am - 9:50am	Seats (Total: 19) SKN 1115
1401	Ashley Aragon MWF 9:00am - 9:50am	Seats (Total: 19) PLS 1176
1601	Janna Soeder, Aaron Swanlek MWF 9:00am - 9:50am	Seats (Total: 19) WDS 1131
2301	Daniel Foster MWF 10:00am - 10:50am	Seats (Total: 19) SKN 0104
2401	Jim Golden MWF 10:00am - 10:50am	Seats (Total: 19) SKN 1112
2501	Aaron Swanlek MWF 10:00am - 10:50am	Seats (Total: 19) SKN 1115
2601	Drew Ashby-King MWF 10:00am - 10:50am	Seats (Total: 19) ARC 1123
2701	Saymin Lee MWF 10:00am - 10:50am	Seats (Total: 19) PLS 1180
2801	Jacqueline Jackson MWF 10:00am - 10:50am	Seats (Total: 19) KEY 0117
2901	Raphael Mazzone, Janna Soeder MWF 10:00am - 10:50am	Seats (Total: 19) WDS 1131

3001	Jaclyn Bruner MWF 10:00am - 10:50am	Seats (Total: 19) ASY 3217
3301	Daniel Foster MWF 11:00am - 11:50am	Seats (Total: 19) SKN 0104
3401	Jim Golden MWF 11:00am - 11:50am	Seats (Total: 19) SKN 1112
3501	Aaron Swanlek MWF 11:00am - 11:50am	Seats (Total: 19) SKN 1115
3601	Drew Ashby-King MWF 11:00am - 11:50am	Seats (Total: 19) ARC 1123
3701	Saymin Lee MWF 11:00am - 11:50am	Seats (Total: 19) PLS 1180
3801	Jacqueline Jackson MWF 11:00am - 11:50am	Seats (Total: 19) KEY 0117
3901	Janna Soeder, Raphael Mazzone MWF 11:00am - 11:50am	Seats (Total: 19) WDS 1131
4001	Jaclyn Bruner MWF 11:00am - 11:50am	Seats (Total: 19) ASY 3217
4301	Daniel Foster MWF 1:00pm - 1:50pm	Seats (Total: 19) SKN 1112
4401	Jim Golden MWF 1:00pm - 1:50pm	Seats (Total: 19) PLS 1176
4501	Aaron Swanlek MWF 1:00pm - 1:50pm	Seats (Total: 19) WDS 1127
4601	Janna Soeder, Jaclyn Bruner MWF 1:00pm - 1:50pm	Seats (Total: 19) SYM 0209
4901	Daniel Foster MWF 2:00pm - 2:50pm	Seats (Total: 19) SKN 1112

5001	Jim Golden MWF 2:00pm - 2:50pm	Seats (Total: 19) PLS 1176
5101	Kathryn Thier MWF 2:00pm - 2:50pm	Seats (Total: 19) WDS 1127
5201	Jaclyn Bruner, Janna Soeder MWF 2:00pm - 2:50pm	Seats (Total: 19) KEY 0124
5601	Raphael Mazzone MW 2:00pm - 3:15pm	Seats (Total: 19) TYD 0111
5701	Kimberley Hannah-Prater MW 2:00pm - 3:15pm	Seats (Total: 19) PLS 1180
5801	Salima Valiyeva MW 2:00pm - 3:15pm	Seats (Total: 19) PLS 1184
5901	Allison Chatham MW 2:00pm - 3:15pm	Seats (Total: 19) JMZ 1103
6001	Alex Thomas MW 2:00pm - 3:15pm	Seats (Total: 19) WDS 1130
6101	Randall Fowler MW 3:30pm - 4:45pm	Seats (Total: 19) TYD 0111
6201	Kimberley Hannah-Prater MW 3:30pm - 4:45pm	Seats (Total: 19) PLS 1180
6301	Salima Valiyeva MW 3:30pm - 4:45pm	Seats (Total: 19) PLS 1184
6401	Sarah Vick MW 3:30pm - 4:45pm	Seats (Total: 19) JMZ 1103
6501	Aya Farhat MW 3:30pm - 4:45pm	Seats (Total: 19) KEY 0119
6601	Sarah Vick MW 5:00pm - 6:15pm	Seats (Total: 19) SKN 0104

6701	David Payne MW 5:00pm - 6:15pm	Seats (Total: 19) SKN 1112
6801	Tori Mends-Cole MW 5:00pm - 6:15pm	Seats (Total: 19) SKN 1115
6901	Kimberley Hannah-Prater MW 5:00pm - 6:15pm	Seats (Total: 19) PLS 1176
7101	Tori Mends-Cole MW 6:30pm - 7:45pm	Seats (Total: 19) SKN 0104
7201	Brittany Gregory MW 6:30pm - 7:45pm	Seats (Total: 19) SKN 1112
7301	Elizabeth Phipps TuTh 8:00am - 9:15am	Seats (Total: 19) PLS 1176
7401	Megu Itoh TuTh 8:00am - 9:15am	Seats (Total: 19) PLS 1180
7501	Fielding Montgomery TuTh 8:00am - 9:15am	Seats (Total: 19) PLS 1184
7601	Taylor Hourigan TuTh 8:00am - 9:15am	Seats (Total: 19) PLS 1164
7701	Julie Gowin TuTh 8:00am - 9:15am	Seats (Total: 19) WDS 1131
7801	Jeremy Grossman TuTh 8:00am - 9:15am	Seats (Total: 19) PLS 1162
8001	Gareth Williams MW 2:00pm - 3:15pm	Seats (Total: 19) ATL 0201
8101	Elizabeth Phipps TuTh 9:30am - 10:45am	Seats (Total: 19) PLS 1176
8201	Megu Itoh TuTh 9:30am - 10:45am	Seats (Total: 19) PLS 1180

8301	Fielding Montgomery TuTh 9:30am - 10:45am	Seats (Total: 19) PLS 1184
8401	Taylor Hourigan TuTh 9:30am - 10:45am	Seats (Total: 19) PLS 1164
8501	Shoaa Almalki TuTh 9:30am - 10:45am	Seats (Total: 19) WDS 1131
8601	Ollie Jefferson TuTh 9:30am - 10:45am	Seats (Total: 19) PLS 1162
8701	Shawna Dias TuTh 9:30am - 10:45am	Seats (Total: 19) SQH 1107
8901	Naette Lee, Jaclyn Bruner TuTh 11:00am - 12:15pm	Seats (Total: 19) PLS 1176
9001	Karen Lamb TuTh 11:00am - 12:15pm	Seats (Total: 19) PLS 1180
9101	Shawna Dias TuTh 11:00am - 12:15pm	Seats (Total: 19) ARC 1123
9201	Sabeen Sheikh TuTh 11:00am - 12:15pm	Seats (Total: 19) KEY 0117
9301	Ollie Jefferson TuTh 11:00am - 12:15pm	Seats (Total: 19) PLS 1113
9401	Hagar Attia TuTh 11:00am - 12:15pm	Seats (Total: 19) JMZ 0118
9501	Jeremy Grossman TuTh 11:00am - 12:15pm	Seats (Total: 19) JMZ 1103
9601	Jaclyn Bruner, Naette Lee TuTh 12:30pm - 1:45pm	Seats (Total: 19) PLS 1176
9701	Karen Lamb TuTh 12:30pm - 1:45pm	Seats (Total: 19) PLS 1180

9801	Shawna Dias TuTh 12:30pm - 1:45pm	Seats (Total: 19) ARC 1123
9901	Sabeen Sheikh TuTh 12:30pm - 1:45pm	Seats (Total: 19) WDS 0104
9902	Ollie Jefferson TuTh 12:30pm - 1:45pm	Seats (Total: 19) PLS 1164
9903	Hagar Attia TuTh 12:30pm - 1:45pm <i>This section of COMM 107 explores the fundamentals of oral communication within the context of community engagement. Students will apply course content to community-based projects.</i>	Seats (Total: 19) JMZ 0118
9904	Alex Thomas TuTh 12:30pm - 1:45pm	Seats (Total: 19) JMZ 1103
9905	Yumin Yan TuTh 2:00pm - 3:15pm	Seats (Total: 19) WDS 0104
9906	Alex Thomas TuTh 2:00pm - 3:15pm	Seats (Total: 19) PLS 1180
9907	Yuan Wang TuTh 2:00pm - 3:15pm	Seats (Total: 19) PLS 1184
9908	L Gordon TuTh 2:00pm - 3:15pm	Seats (Total: 19) WDS 1131
9909	Jeremy Grossman TuTh 2:00pm - 3:15pm	Seats (Total: 19) PLS 1164
9910	Jade Olson TuTh 2:00pm - 3:15pm	Seats (Total: 19) ESJ B0320
9911	Taryn Myers TuTh 3:30pm - 4:45pm	Seats (Total: 19) SKN 0104
9912	Soyoung Bae TuTh 3:30pm - 4:45pm	Seats (Total: 19) PLS 1180

9913	Karen Lamb TuTh 3:30pm - 4:45pm	Seats (Total: 19) PLS 1184
9914	L Gordon TuTh 3:30pm - 4:45pm	Seats (Total: 19) WDS 1131
9915	Mollie Kaufer TuTh 3:30pm - 4:45pm	Seats (Total: 19) ARC 1125
9916	Jade Olson TuTh 3:30pm - 4:45pm	Seats (Total: 19) ESJ B0320
9917	Cassondra Pope TuTh 5:00pm - 6:15pm	Seats (Total: 19) PLS 1164
9918	Ollie Jefferson TuTh 5:00pm - 6:15pm	Seats (Total: 19) PLS 1180
9919	Jeremy Grossman TuTh 5:00pm - 6:15pm	Seats (Total: 19) HBK 1108
9921	Tori Mends-Cole TuTh 5:00pm - 6:15pm	Seats (Total: 19) JMZ 0205
9923	Cassondra Pope TuTh 6:30pm - 7:45pm	Seats (Total: 19) PLS 1164
9924	L Gordon TuTh 6:30pm - 7:45pm	Seats (Total: 19) PLS 1180
9927	Daniel Foster MWF 3:00pm - 3:50pm	Seats (Total: 19) WDS 0104
FC01	Jim Golden MW 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) HBK 0125
FC02	Randall Fowler TuTh 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) JMZ 0120

FC03	Thomas McCloskey TuTh 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) SKN 1112
FC04	Gerry Strumpf MW 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) ASY 3217
FC05	Raphael Mazzone MW 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) WDS 1131
FC06	Paula Nadler MW 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) WDS 1130
FC07	David Payne MW 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection</i>	Seats (Total: 19) KEY 0124
FC08	Sue Sherburne TuTh 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) WDS 1131
FC09	Hagar Attia TuTh 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) WDS 1130

COMM107B Oral Communication: Principles and Practices

Credits: 3 Grading Method: Regular,
 Pass-Fail General Education: FSOC

Credit only granted for: COMM107, COMM200, ENES143, INAG110, JOUR130 or THET285.

A study of and practice in oral communication, including principles of interviewing, group discussion, listening, informative briefings, and persuasive speeches.

This class is designed for current or prospective Business Majors.

COMM200**Critical Thinking and Speaking**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO General Education: FSOC

Credit only granted for: COMM107, COMM200, ENES143, INAG110, JOUR130, OR THET285.

Theory and practice of persuasive discourse analysis and composition. Research techniques, logical and rhetorical conceptions of argument, and technical principles for persuading in public venues.

Attendance on the first day of classes is mandatory.

0101	Christopher Swift TuTh 12:30pm - 1:45pm	Seats (Total: 19) PLS 1162
0201	Christopher Swift TuTh 8:00am - 9:15am	Seats (Total: 19) SKN 0104
0301	Christopher Swift TuTh 9:30am - 10:45am	Seats (Total: 19) KEY 0119
0401	Christopher Swift TuTh 2:00pm - 3:15pm	Seats (Total: 19) JMZ 0118

COMM201**Introduction to Public Relations**

Credits: 3 Grading Method: Regular

Basic concepts and principles of public relations. Roles in organizations and society; history; skills and practices of public relations; theories and models of effective and ethical public relations.

Restricted to COMM majors (1506A) only.

0101	Brooke Liu MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 20) SKN 0200 PLS 1180	Discussion
0102	Brooke Liu MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 20) SKN 0200 KEY 0123	Discussion
0103	Brooke Liu MW 2:00pm - 2:50pm F 2:00pm - 2:50pm	Seats (Total: 20) SKN 0200 PLS 1180	Discussion

0104	Brooke Liu	Seats (Total: 20)	
	MW 2:00pm - 2:50pm	SKN 0200	
	F 2:00pm - 2:50pm	KEY 0123	Discussion
0105	Brooke Liu	Seats (Total: 20)	
	MW 2:00pm - 2:50pm	SKN 0200	
	F 3:00pm - 3:50pm	PLS 1180	Discussion
0106	Brooke Liu	Seats (Total: 20)	
	MW 2:00pm - 2:50pm	SKN 0200	
	F 3:00pm - 3:50pm	KEY 0123	Discussion

COMM230

Argumentation and Debate

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A study of the fundamental principles of reasoning, analysis, and evidence preparation of debate briefs and presentation of standard academic debate.

Attendance on the first day of class is mandatory.

0101	Darrian Carroll	Seats (Total: 24)	
	TuTh 8:00am - 9:15am	LEF 1171	
0201	Jeremy Grossman	Seats (Total: 24)	
	TuTh 9:30am - 10:45am	SKN 1112	
0301	Victoria Ledford	Seats (Total: 24)	
	TuTh 11:00am - 12:15pm	PLS 1184	
0401	Darrian Carroll	Seats (Total: 24)	
	TuTh 12:30pm - 1:45pm	PLS 1184	

COMM250

Introduction to Communication Inquiry

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An introduction to the field of communication. Definitions, models, and contexts of communication; rhetorical theory and rhetorical criticism of discourse.

0101	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 23) SKN 0200 ONLINE HBK 0123	Discussion
0102	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 23) SKN 0200 ONLINE HBK 0123	Discussion
0103	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 23) SKN 0200 ONLINE HBK 0123	Discussion
0104	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 23) SKN 0200 ONLINE ATL 1114	Discussion
0105	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 23) SKN 0200 ONLINE ATL 1114	Discussion
0106	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 11:00am - 11:50am	Seats (Total: 23) SKN 0200 ONLINE ATL 1114	Discussion
0107	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 9:00am - 9:50am	Seats (Total: 23) SKN 0200 ONLINE JMP 1109	Discussion
0108	Susan Hubbard MW 11:00am - 11:50am Class time/details on ELMs F 10:00am - 10:50am	Seats (Total: 23) SKN 0200 ONLINE JMP 1109	Discussion

0109	Susan Hubbard	Seats (Total: 23)
	MW 11:00am - 11:50am	SKN 0200
	Class time/details on ELMs	ONLINE
	F 11:00am - 11:50am	JMP 1109 Discussion

COMM269B Special Topics in Study Abroad II; Oral Communication for Leaders in the Business World

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

COMM269C Special Topics in Study Abroad II; Designing Communication Campaigns

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

COMM269M Special Topics in Study Abroad II; Media Technology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

COMM269P Special Topics in Study Abroad II; Principles of Film and Media Production

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

COMM269R Special Topics in Study Abroad II; Introduction to Public Relations

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

COMM288 Communication Internship

(Perm req)

Credits: 1-6

Grading Method: Regular,
Pass-Fail, Audit

An individual experience arranged by the student with the instructor. Does not satisfy communication major requirements. 45 hours of supervised internship per credit hour with communication professional. Not a substitute for COMM386.

0101	Julie Gowin	Seats (Total: 20)
Contact instructor or department for details.		
0601	Leah Waks	Seats (Total: 20)
Contact instructor or department for details.		

COMM298R Selected Topics in Communication; Introduction to Public Relations

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Special topical study of contemporary issues in communication.

Contact department for information to register for this course.

COMM324 Communication and Gender

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

, D

General Education: DSHU,
DVUP

The creation of images of male and female, and masculine and feminine, through communication, the differences in male and female communication behaviors and styles, and the implications of those images and styles for male-female transactions.

0101	Skye De Saint Felix	Seats (Total: 35)
	MW 3:30pm - 4:45pm	CHM 0119
0201	Skye De Saint Felix	Seats (Total: 35)
	MW 5:00pm - 6:15pm	CHM 0119
0301	Aya Farhat	Seats (Total: 35)
	TuTh 8:00am - 9:15am	SKN 1115
0401	Aya Farhat	Seats (Total: 35)
	TuTh 9:30am - 10:45am	SKN 1115

COMM330 Argumentation and Public Policy

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Contemporary theories of argumentation with special emphasis on methods of formulating and critiquing public policy argument.

0101	Randall Fowler	Seats (Total: 35)
	MW 2:00pm - 3:15pm	PLS 1117
ESG1	Jade Olson	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	BLD3 2225
	<i>Restricted to COMM majors at Shady Grove.</i>	

COMM331 News Writing and Reporting for Public Relations

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: COMM201; and must have completed or be concurrently enrolled in JOUR181.

Restriction: Must be in Communication program; and (sophomore standing; or junior standing). Or permission of ARHU-Communication department. Credit only granted for: JOUR201, COMM231, or COMM331. Formerly: COMM231.

Writing and researching news and information media for public relations; laboratory in news-gathering tools and writing techniques for public relations.

0101	Susan Simon	Seats (Total: 18)
	M 11:00am - 12:50pm	PLS 1129
	W 11:00am - 12:50pm	PLS 1129 Lab

COMM332 News Editing for Public Relations

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in COMM331; or students who have taken courses with comparable content may contact the department. And permission of ARHU-Communication department.

Restriction: Must be in Communication program. Credit only granted for: JOUR202, COMM232, or COMM332. Formerly: COMM232.

Copy editing, graphic principles and processes, news and information technologies for public relations.

0101	Vijaya Bohlmann	Seats (Total: 18)
	Tu 8:00am - 9:15am	PLS 1129
	Th 8:00am - 9:15am	PLS 1129 Lab

0201	Vijaya Bohlmann	Seats (Total: 18)	
	Tu 9:30am - 10:45am	PLS 1129	
	Th 9:30am - 10:45am	PLS 1129	Lab
0401	Erich Sommerfeldt	Seats (Total: 18)	
	Tu 3:30pm - 4:45pm	PLS 1129	
	Th 3:30pm - 4:45pm	PLS 1129	Lab

COMM351

Public Relations Techniques

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: COMM332. Restriction: Must be in Communication program. Credit only granted for: COMM351 or JOUR331. Formerly: JOUR331.

The techniques of public relations, including news releases, publications and printed materials, audio-visual techniques, speeches and special events. Application of these techniques in laboratory and field projects.

0101	Sarah Aghazadeh	Seats (Total: 18)	
	M 1:00pm - 2:15pm	PLS 1129	
	W 1:00pm - 2:15pm	PLS 1129	Lab
0201	Susan Simon	Seats (Total: 18)	
	M 2:30pm - 3:45pm	PLS 1129	
	W 2:30pm - 3:45pm	PLS 1129	Lab
0401	Steven Drake	Seats (Total: 18)	
	MW 5:30pm - 6:45pm	PLS 1129	

COMM353

New Media Writing for Public Relations

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: Minimum grade of C- in COMM351. Restriction: Must be in Communication program. Credit only granted for: COMM352 or COMM353. Formerly: COMM352.

Students learn the uses and influence of new media on public relations practice and expand their ability to write using new and traditional media platforms and tools

0101	Sumin Fang	Seats (Total: 18)	
	Tu 2:00pm - 3:15pm	PLS 1129	
	Th 2:00pm - 3:15pm	PLS 1129	Lab

0201	Sumin Fang	Seats (Total: 18)	
	Tu 12:30pm - 1:45pm	PLS 1129	
	Th 12:30pm - 1:45pm	PLS 1129	Lab

COMM354 Public Relations Programs

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: COMM350. Credit only granted for: COMM354 or JOUR334. Formerly: JOUR334.

Analysis of eight major programs typically carried out by public relations professionals: employee relations, media relations, financial relations, member relations, governmental relations, community relations, fundraising and dealing with activist public.

COMM201 may be used to satisfy COMM350 prerequisite.

0101	Sun Young Lee	Seats (Total: 35)
	MW 5:00pm - 6:15pm	KEY 0126

COMM360 The Rhetoric of Black America

Credits: 3 Grading Method: Regular, , D
Pass-Fail, Audit

An historical-critical survey of the rhetoric of Black Americans from the colonial period to the present.

0101	Darrian Carroll	Seats (Total: 35)
	TuTh 9:30am - 10:45am	TYD 0111

COMM370 Mediated Communication

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: COMM250. Restriction: Junior standing or higher.

Analysis and critique of structure, performance, content, effects, and future of mediated communication.

0101	Catherine Steele	Seats (Total: 35)
	TuTh 9:30am - 10:45am	ARC 1101
ESG1	Soyoung Bae	Seats (Total: 40)
	MW 11:00am - 12:15pm	BLD3 2225
<i>Restricted to COMM majors at Shady Grove.</i>		

COMM371 Communication and Digital Media

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in Communication program. Credit only granted for: COMM371 or COMM398V. Formerly: COMM398V.

A basic introduction to communication in the digital age. Through class lectures, assignments and projects, students will learn to effectively use new media for the purpose of strategic message creation and management used in the field of communication. Students will apply the basics of visual layout skills and the principles of visual design to create messages using words and images.

ESG1	Robert Coleman	Seats (Total: 25)
	MW 9:00am - 10:45am	BLD3 3216
<i>Restricted to COMM majors at Shady Grove.</i>		

COMM372 Communication, Meaning, and Digital Media

Credits: 3 Grading Method: Regular

Restriction: Must be in Communication program.

An exploration of visual communication and meaning creation. A theoretical and practical application of communication concepts and techniques in the production of visual content.

Formerly COMM498J. Credit granted for COMM498J or COMM372.

ESG1	Adam Nixon	Seats (Total: 25)
	M 4:15pm - 6:45pm	BLD3 3216
<i>Restricted to COMM majors at Shady Grove.</i>		

COMM373 Communication and Digital Visual Narrative

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in Communication program.

Examination of the traditional style of visual communication, its practices and theoretical underpinnings juxtaposed against contemporary digital media aesthetics and techniques. Utilizing a variety of communication skills and new media tools, students will plan, write, shoot, edit, and upload digital visual narratives.

Formerly COMM498K. Credit granted for COMM498K or COMM373.

ESG1	Adam Nixon	Seats (Total: 25)
	Tu 4:15pm - 6:45pm	BLD3 3216
<i>Restricted to COMM majors at Shady Grove.</i>		

COMM375 Documentary Theory and Practice

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in Communication program.

A historical and theoretical introduction to documentary films and videos. Students will explore the power of documentaries to address socially significant issues.

ESG1	Adam Nixon	Seats (Total: 25)
	W 4:15pm - 6:45pm	BLD3 3216
<i>Restricted to COMM majors at Shady Grove.</i>		

COMM382 Essentials of Intercultural Communication

Credits: 3 Grading Method: Regular, , D General Education: DVCC
Pass-Fail, Audit

Credit only granted for: COMM382 or COMM482.

Introduction of major theories and concepts of intercultural communication; examination of processes that make up cultural differences; and use of intercultural communication competence skills.

0201	David Payne	Seats (Total: 35)
	TuTh 3:30pm - 4:45pm	CSI 2118
0301	David Payne	Seats (Total: 35)
	TuTh 5:00pm - 6:15pm	CSI 2118
ESG1	David Payne	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	BLD3 2226
<i>Restricted to COMM majors at Shady Grove.</i>		

COMM385 Influence

Credits: 3 Grading Method: Regular, General Education: DSSP,
Pass-Fail, Audit SCIS

Credit only granted for: COMM385 or COMM498I (Spring 2014). Formerly: COMM498I (Spring 2014).

Explores contemporary theories of influence and their implications for communication practice. Topics include power and influence, logical theory, rhetorical theory, persuasion theory, framing theory, social influence theory, and propagation of influence in mediated social networks.

0101	Dale Hample	Seats (Total: 80)
	TuTh 5:00pm - 6:15pm	ASY 1213

COMM386

Experiential Learning

(Perm req)

Credits: 3-6

Grading Method: Regular,
Pass-Fail

General Education: DSSP

Prerequisite: Permission of ARHU-Communication department. Restriction: Junior standing or higher; and must be in Communication program.

Supervised internship experience with communication professionals. Relation of academic training to professional experience.

0101	Julie Gowin	Seats (Total: 75)
	Contact instructor or department for details.	
ESG1	Raimonda Nuredini	Seats (Total: 20)
	Contact instructor or department for details.	
	<i>Restricted to COMM majors at Shady Grove.</i>	

COMM388

Communication Practicum

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail

Supervised professional-level practice in communication.

Contact department for information to register for this course.

COMM398

Selected Topics in Communication

(Perm req)

Credits: 3

Grading Method: Regular

Topical study of contemporary issues in communication.

Contact department for information to register for this course.

COMM398C

Selected Topics in Communication; Peer Consulting in Oral Communication

(Perm req)

Credits: 3

Grading Method: Regular

Topical study of contemporary issues in communication.

Prerequisite: permission of department. Provides training in the principles and practice of peer consulting in the context of an oral communication center. Students will apply and integrate the knowledge and skills acquired in COMM107 (or COMM200) with new training to help their peers become outstanding listeners and speakers. They will also engage in a group research project designed to extend knowledge in peer consulting best practices.

0101	Raphael Mazzone	Seats (Total: 20)
	TuTh 5:00pm - 6:15pm	SKN 2117
	Contact instructor or department for details.	

COMM398D Selected Topics in Communication; Basics of Graphic Design for Strategic Communications

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

Restricted to COMM majors (1506A) only. Students will use computer technology to explore the communication potential of type, white space, information graphics, photographs, and other design elements and apply them to publications relevant to the publications relevant to the public relations industry.

0101	Erich Sommerfeldt	Seats (Total: 18)
	F 1:00pm - 4:00pm	PLS 1129

COMM398F Selected Topics in Communication; Web Graphics, Coding, and Site Design

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

Contact department for information to register for this course.

COMM398K Selected Topics in Communication; Communication and Strategic Message Design

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

ESG1	Robert Coleman	Seats (Total: 25)
	MW 11:00am - 12:15pm	BLD3 3216
	<i>Restricted to COMM majors at Shady Grove.</i>	

COMM398L Selected Topics in Communication; Science, Media, and the Public

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

This course is designed to introduce the interrelationship among science , media, and society. We will address current thinking about how do mass media shape the nature of public debates about science, where do people go for information about science, and how public understand science. Upon successful completion of this course, students will be able to specify the roles of knowledge, expertise, risk, media, public understanding and discourse play in perceptions of science and policy making.

0101	Ji Youn Kim	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	ARC 1101

COMM398N Selected Topics in Communication; Communication and Digital Imaging

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

ESG1	Robert Coleman	Seats (Total: 25)
	MW 2:00pm - 3:45pm	BLD3 3216
<i>Restricted to COMM majors at Shady Grove.</i>		

COMM398Q Selected Topics in Communication; Social Media Analytics

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

ESG1	Adam Nixon	Seats (Total: 40)
	Th 4:15pm - 6:45pm	BLD3 2225
<i>Restricted to COMM majors at Shady Grove.</i>		

COMM398Z Selected Topics in Communication; Media Ethics and Cultural Citizenship

Credits: 3 Grading Method: Regular

Topical study of contemporary issues in communication.

Contact department for information to register for this course.

COMM399 Honors Thesis

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

0601	Leah Waks	Seats (Total: 10)
Contact instructor or department for details.		

1001	Andrew Wolvin	Seats (Total: 5)
	Contact instructor or department for details.	
3801	Dale Hample	Seats (Total: 10)
	Contact instructor or department for details.	
4001	Xiaoli Nan	Seats (Total: 10)
	Contact instructor or department for details.	
4601	Michelle Yang	Seats (Total: 5)
	Contact instructor or department for details.	
4801	Nick Joyce	Seats (Total: 5)
	Contact instructor or department for details.	
4901	Lindsey Anderson	Seats (Total: 5)
	Contact instructor or department for details.	
5301	Kang Namkoong	Seats (Total: 5)
	Contact instructor or department for details.	
5501	Catherine Steele	Seats (Total: 5)
	Contact instructor or department for details.	

COMM400

Research Methods in Communication

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: COMM250; and must have an introductory course in statistics. Restriction: Must be in Communication program.

Philosophy of scientific method; role of theory; research ethics; empirical research methods (measurement, sampling, design, analysis).

Attendance on the first day of class is mandatory.

0101	Soyoung Bae	Seats (Total: 20)
	TuTh 2:00pm - 2:50pm	MMH 1400
	F 9:00am - 9:50am	CSI 3120 Discussion
0102	Soyoung Bae	Seats (Total: 20)
	TuTh 2:00pm - 2:50pm	MMH 1400
	F 10:00am - 10:50am	CSI 3120 Discussion

0103	Soyoung Bae TuTh 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 20) MMH 1400 CSI 3120	Discussion
0104	Soyoung Bae TuTh 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 20) MMH 1400 VMH 1207	Discussion
0105	Soyoung Bae TuTh 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 20) MMH 1400 VMH 1207	Discussion
0106	Soyoung Bae TuTh 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 20) MMH 1400 VMH 1207	Discussion
0201	Soyoung Bae TuTh 5:00pm - 6:15pm	Seats (Total: 35) TYD 2111	
0301	Rong Ma TuTh 2:00pm - 3:15pm	Seats (Total: 35) JMP 1202	

COMM401 Interpreting Strategic Discourse

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: COMM250. Restriction: Must be in Communication program.

Principles and approaches for practical analysis of discourse designed to shape audience opinion.

Attendance on the first day of classes is mandatory.

0101	Kristjana Maddux TuTh 12:30pm - 1:20pm W 9:00am - 9:50am	Seats (Total: 20) ESJ 2204 PLS 1164	Discussion
0102	Kristjana Maddux TuTh 12:30pm - 1:20pm W 10:00am - 10:50am	Seats (Total: 20) ESJ 2204 PLS 1164	Discussion

0103	Kristjana Maddux TuTh 12:30pm - 1:20pm W 11:00am - 11:50am	Seats (Total: 20) ESJ 2204 PLS 1164	Discussion
0104	Kristjana Maddux TuTh 12:30pm - 1:20pm W 9:00am - 9:50am	Seats (Total: 20) ESJ 2204 PLS 1184	Discussion
0105	Kristjana Maddux TuTh 12:30pm - 1:20pm W 10:00am - 10:50am	Seats (Total: 20) ESJ 2204 PLS 1184	Discussion
0106	Kristjana Maddux TuTh 12:30pm - 1:20pm W 11:00am - 11:50am	Seats (Total: 20) ESJ 2204 PLS 1184	Discussion
ESG1	Jade Olson TuTh 9:30am - 10:45am <i>Restricted to COMM majors at Shady Grove.</i>	Seats (Total: 40) BLD3 3202	

COMM402

Communication Theory and Process

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: COMM250. Restriction: Must be in Communication program.

Philosophical and conceptual analysis of communication theories.

Attendance on the first day of classes is mandatory.

0101	Kang Namkoong MW 12:00pm - 12:50pm M 9:00am - 9:50am	Seats (Total: 20) JMP 3201 JMP 1109	Discussion
0102	Kang Namkoong MW 12:00pm - 12:50pm M 10:00am - 10:50am	Seats (Total: 20) JMP 3201 JMP 1109	Discussion
0103	Kang Namkoong MW 12:00pm - 12:50pm M 11:00am - 11:50am	Seats (Total: 20) JMP 3201 JMP 1109	Discussion

0104	Kang Namkoong	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	JMP 3201	
	M 9:00am - 9:50am	PLS 1184	Discussion
0105	Kang Namkoong	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	JMP 3201	
	M 10:00am - 10:50am	PLS 1184	Discussion
0106	Kang Namkoong	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	JMP 3201	
	M 11:00am - 11:50am	PLS 1184	Discussion
ESG1	Soyoung Bae	Seats (Total: 40)	
	MW 12:30pm - 1:45pm	BLD3 4220	
	<i>Restricted to COMM majors at Shady Grove.</i>		

COMM421 **Communicating Leadership**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Examines the nature of leadership, theories of leadership from a communication perspective, relationships between leadership, authority, power, and ethics. Explores leadership responsibilities, commitments, and actions.

ESG1	Leah Waks	Seats (Total: 35)	
	Tu 1:00pm - 3:30pm	BLD3 3219	
	<i>Restricted to COMM majors at Shady Grove.</i>		

COMM422 **Communication Management**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Communication policies, plans, channels, and practices in the management of the communication function in organizations.

0101	Andrew Wolvin	Seats (Total: 35)	
	TuTh 9:30am - 10:45am	SKN 0104	

COMM425 **Negotiation and Conflict Management**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Role of communication in shaping negotiation and conflict processes and outcomes.

This course is restricted to COMM majors only.

0101	Lauren Edelstein	Seats (Total: 45)
	TuTh 11:00am - 12:15pm	CCC 1111

COMM426 Conflict Management

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Recommended: COMM425; and COMM250; and COMM402.

Role of communication in managing conflict processes.

This course is restricted to COMM majors only.

0101	Lauren Edelstein	Seats (Total: 45)
	TuTh 9:30am - 10:45am	CCC 1111

COMM427 Crisis Communication

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: COMM398C or COMM427. Formerly: COMM398C.

Explores theories and research related to communication before, during, and after a crisis. Students examine the fundamentals of organizational communication, crisis management, and strategic and crisis communication planning before examining case studies of a number of real-life crises: organizational crises, natural disasters, accidents, terrorism incidents, health crises, and major crises of credibility.

0101	Brooke Liu	Seats (Total: 35)
	MW 3:30pm - 4:45pm	SKN 1115

COMM435 Theories of Interpersonal Communication

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: COMM400; or permission of ARHU-Communication department.

Major theoretical approaches and research trends in the study of interpersonal communication.

0101	Dale Hample	Seats (Total: 35)
	TuTh 3:30pm - 4:45pm	ASY 3207

COMM450 Ancient and Medieval Rhetorical Theory

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: COMM250. Restriction: Must be in Communication program. Credit only granted for: COMM450 or COMM650.

A survey of rhetorical theory in the ancient and medieval periods. Emphasis is placed on the theoretical problems that gave rise to its development within both periods. Authors include Isocrates, Plato, Aristotle, Cicero, Quintilian, Hermogenes, Martianus Capella, Aurelius Augustine, Alberic of Monte Cassino, Geoffrey of Vinsauf and Robert of Basevorn.

0101	Damien Pfister	Seats (Total: 35)
	MW 2:00pm - 3:15pm	TYD 2111

COMM458H Seminar in Political Communication; Rhetoric, Memory, and Culture

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The examination of special topics for and theories of political communication.

Restricted to students in the Departmental Honors Program. Departmental Honors students should email commadvising @umd.edu for permission to register. This course will explore the rhetoric and politics of public memory with a particular emphasis on how race, gender, and sexuality are represented in museums, memorials, and other commemorative spaces.

0101	Carly Woods	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	SKN 2127

COMM460 Public Life in American Communities, 1634-1900

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Ways that Americans have used their voice to create public life. Focus is on the diverse social communities that have characterized American life and the place and characteristics of oral discourse in each.

0101	Carly Woods	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	ARC 1101

COMM468A Seminar in Mediated Communication; Arab Media

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The examination of special topics related to the study of mediated communication.

0101	Sahar Khamis	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	WDS 1114

COMM4690 The Discourse of Social Movements; Rhetoric of Oppressed Peoples

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Study of key social movements that have influenced American social and political life. In alternate years the Civil Rights Movement and the Rhetoric of Women's Suffrage and Abolitionism. Consideration of how groups excluded from or marginalized in American political life affect social change.

0101	Michelle Yang	Seats (Total: 35)
	MW 5:00pm - 6:15pm	SQH 1121

COMM470 Listening

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The principles of listening behavior.

This course is restricted to COMM majors only.

0101	Andrew Wolvin	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	SKN 0104

COMM475 Persuasion

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Bases of persuasion, with emphasis on recent experimental developments in persuasion.

This course is restricted to COMM majors only.

0101	Susan Hubbard	Seats (Total: 45)
	MW 12:30pm - 1:45pm	TYD 1132

COMM476 Language, Communication, and Action

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The nature of communication as symbolic action. Topics include language, meaning, intention, understanding, and consequences of communication.

Retricted to COMM majors (1506A) only.

0101	Elizabeth Toth	Seats (Total: 35)
	MW 2:00pm - 3:15pm	KEY 0103

COMM478 Communication Colloquium

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Current trends and issues in the field of communication, stressing recent research methods. Recommended for senior and graduate student majors and minors in communication.

0101	Damien Pfister	Seats (Total: 50)
	F 12:00pm - 1:30pm	SKN 0200

COMM483 Senior Seminar in Public Relations

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: COMM351 and COMM400. Credit only granted for: COMM483 or JOUR483. Formerly: JOUR483.

Integration of theory, techniques and research methods into the planning and execution of public relations campaigns for specific organizations. Analysis of research on the case studies of public relations.

0101	Susan Simon	Seats (Total: 20)
	TuTh 9:30am - 10:45am	BPS 1232

COMM488I Communication Portfolio Project; Strategic Interviewing for the Career You Want

Credits: 1 Grading Method: Regular

Preparation of the professional communication portfolio.

This course introduces students to advanced techniques in interviewing for job opportunities and career progression. This online course focuses on the dynamics of the interview process, the communication theories and best practices behind influence and persuasion, and the communication aptitudes and skills that distinguish top candidates.

0101	Gareth Williams	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

COMM489 Topical Research

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Individualized research projects conducted with a faculty sponsor.

Contact department for information to register for this course.

COMM498J Seminar; Strategic Communication

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Present-day communication research.

This course presents a system of strategies that underlie communication. It is a practice-based framework with definitions, conditions, risks and rewards that inform the moves and motives of influence professionals. Through a series of interactive lectures, landmark writings, group exercises and classroom simulations, students will learn to decode, defend, apply and ethically manage the ever-present plays of dynamic, media-driven markets.

0101	Alan Kelly	Seats (Total: 35)
	Tu 5:00pm - 7:30pm	PLS 1113

COMM498M Seminar; The Israeli War Discourse

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Present-day communication research.

Cross-listed with ISRL448M. Credit only granted for ISRL448M or COMM498M . This online course focuses on a unique discourse in Israel, 'war-normalizing discourse', a set of linguistic, discursive, and cultural devices that blur the anomalous characteristics of war by transforming war into a "normal" part of life. The course will examine the reciprocal relations between this discourse, Israeli culture and society, and foreign policy.

0101	Elie Friedman	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

COMM498R Seminar; Risk Communication

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Present-day communication research.

0101	Ji Youn Kim	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	SQH 1103

COMM498V Seminar; Visual Rhetoric

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Present-day communication research.

Restricted to COMM (1506A) majors only.

0101	Michelle Yang	Seats (Total: 35)
	MW 3:30pm - 4:45pm	SQH 1121

COMM498X Seminar; Writing for Communication Professionals

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Present-day communication research.

ESG1	Mollie Kaufer	Seats (Total: 25)
	MW 12:30pm - 1:45pm	BLD3 2225
<i>Restricted to COMM majors at Shady Grove.</i>		

COMM602 Communication Theory

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in one of the following programs (Communication (Master's); Communication (Doctoral)).

Fundamental concepts, approaches, and problems in communication theory.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XG01	Esperanza Pombo Lopez-Barron	Seats (Total: 16)
	M 2:00pm - 4:15pm	SKN 3118
	<i>Biweekly.</i>	

COMM609B **Fundamentals of Interpreting; Arabic into English/English into Arabic**

Credits: 1 Grading Method: Regular, Audit

Develops a systematic, reflective approach to interpreting tasks in real-world settings and outlines the use of different modes of interpreting under professional working conditions. Provides an overview of interpreting skills with exercises to develop them, including focus on active listening and analysis, effective use of memory, and delivery of the target message. Interpreting strategies and techniques in both dialogue and formal consecutive settings are discussed and practiced in a range of interpreting domains. Includes sight translation.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XGA1	Ihab Ali	Seats (Total: 16)
	Sa 2:00pm - 3:15pm	SKN 2127
	Weekly. Start Date: 09-01.	
XGE1	Ihab Ali	Seats (Total: 16)
	Sa 3:30pm - 4:30pm	SKN 2127

COMM609C **Fundamentals of Interpreting; Sight Translation: Arabic into English/English into Arabic**

Credits: 1 Grading Method: Regular, Audit

Develops a systematic, reflective approach to interpreting tasks in real-world settings and outlines the use of different modes of interpreting under professional working conditions. Provides an overview of interpreting skills with exercises to develop them, including focus on active listening and analysis, effective use of memory, and delivery of the target message. Interpreting strategies and techniques in both dialogue and formal consecutive settings are discussed and practiced in a range of interpreting domains. Includes sight translation.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XGA1	John Samaha Jr	Seats (Total: 16)
	Class time/details on ELMs	ONLINE
XGE1	John Samaha Jr	Seats (Total: 16)
	Class time/details on ELMs	ONLINE

COMM609F Fundamentals of Interpreting; French into English/English into French

Credits: 1 Grading Method: Regular,
 Audit

Develops a systematic, reflective approach to interpreting tasks in real-world settings and outlines the use of different modes of interpreting under professional working conditions. Provides an overview of interpreting skills with exercises to develop them, including focus on active listening and analysis, effective use of memory, and delivery of the target message. Interpreting strategies and techniques in both dialogue and formal consecutive settings are discussed and practiced in a range of interpreting domains. Includes sight translation.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XGE1	Pascale Kraus	Seats (Total: 16)
	W 3:30pm - 5:30pm	SKN 3118
	<i>English into French. Biweekly. Start Date: 09-04.</i>	
XGF1	Pascale Kraus	Seats (Total: 16)
	W 5:30pm - 7:30pm	SKN 3118
	<i>French into English. Biweekly. Start Date: 09-04.</i>	

COMM609G Fundamentals of Interpreting; Sight Translation: French into English/English into French

Credits: 1 Grading Method: Regular,
 Audit

Develops a systematic, reflective approach to interpreting tasks in real-world settings and outlines the use of different modes of interpreting under professional working conditions. Provides an overview of interpreting skills with exercises to develop them, including focus on active listening and analysis, effective use of memory, and delivery of the target message. Interpreting strategies and techniques in both dialogue and formal consecutive settings are discussed and practiced in a range of interpreting domains. Includes sight translation.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XGE1	Brigitte Andreassier	Seats (Total: 16)
	Class time/details on ELMs	ONLINE
XGF1	Rosalinda Meza-Steel	Seats (Total: 16)
	Sa 2:30pm - 3:30pm	SKN 3117
	<i>French into English. Biweekly. Start date: 08-31.</i>	

COMM609M Fundamentals of Interpreting; Spanish into English/English into Spanish

Credits: 1 Grading Method: Regular,
 Audit

Develops a systematic, reflective approach to interpreting tasks in real-world settings and outlines the use of different modes of interpreting under professional working conditions. Provides an overview of interpreting skills with exercises to develop them, including focus on active listening and analysis, effective use of memory, and delivery of the target message. Interpreting strategies and techniques in both dialogue and formal consecutive settings are discussed and practiced in a range of interpreting domains. Includes sight translation.

XGE1	Esperanza Pombo Lopez-Barron	Seats (Total: 16)
	M 11:00am - 1:15pm	SKN 3118
	<i>English into Spanish. Biweekly.</i>	
XGS1	Rosalinda Meza-Steel	Seats (Total: 16)
	Sa 11:30am - 1:30pm	SKN 3117
	<i>Spanish into English. Biweekly. Start Date: 08-31.</i>	

COMM609N Fundamentals of Interpreting; Sight Translation: Spanish into English/English into Spanish

Credits: 1 Grading Method: Regular,
 Audit

Develops a systematic, reflective approach to interpreting tasks in real-world settings and outlines the use of different modes of interpreting under professional working conditions. Provides an overview of interpreting skills with exercises to develop them, including focus on active listening and analysis, effective use of memory, and delivery of the target message. Interpreting strategies and techniques in both dialogue and formal consecutive settings are discussed and practiced in a range of interpreting domains. Includes sight translation.

XGE1	Rosalinda Meza-Steel	Seats (Total: 16)
	Sa 3:30pm - 4:30pm	SKN 3117
	<i>English into Spanish. Biweekly. Start Date: 08-31.</i>	

XGS1	Rosalinda Meza-Steel	Seats (Total: 16)
	Sa 10:30am - 11:30am	SKN 3117
<i>Spanish into English. Biweekly. Start Date: 08-31.</i>		

COMM609W Fundamentals of Interpreting; Sight Translation - Italian into Spanish/Spanish into Italian

Credits: 1 Grading Method: Regular,
 Audit

Develops a systematic, reflective approach to interpreting tasks in real-world settings and outlines the use of different modes of interpreting under professional working conditions. Provides an overview of interpreting skills with exercises to develop them, including focus on active listening and analysis, effective use of memory, and delivery of the target message. Interpreting strategies and techniques in both dialogue and formal consecutive settings are discussed and practiced in a range of interpreting domains. Includes sight translation.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

Contact department for information to register for this course.

COMM610 Introduction to Translation and Interpreting Studies

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: Students must complete an admissions test for first year courses; and permission of ARHU-Communication department.

Provides an overview of the interdisciplinary fields of Translation and Interpreting Studies and establishes relationships between scholarly study and professional practice. Examines how theories and concepts inform practice, guide to a higher level of competence, and address issues of interlingual, intercultural mediation in authentic, real-world settings both past and present. serves as a foundation course for reflective practice and portfolio work through action research methodology and process

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

Click here for program information.

PG01	David Sawyer	Seats (Total: 30)
	Th 5:30pm - 8:30pm	SKN 3118

COMM618 Professional Communication: Rhetoric & Style

Credits: 3 Grading Method: Regular

Writing instruction in English for professional communicators with a focus on rhetoric, style, and grammar. Designed to teach English writing skills focused on message creation and organization, sentence structure, and language use, typologies of rhetorical genres, registers, and style, research skills, summary-writing skills, to editing skills, and vocabulary building in English writing.

PLF1	Mollie Kaufer	Seats (Total: 25)
	Class time/details on ELMs	ONLINE
	<i>Must be in Enhanced English Fluency program, Online. For permission to enroll, contact oes@umd.edu.</i>	

COMM619 Consecutive Interpretation

Credits: 2-6 Grading Method: Regular,
Audit

Builds upon the systematic, reflective approach to interpreting in real-world settings introduced in Fundamentals of Interpreting. Consecutive interpreting skills are consolidated through individual and group practice, and any remaining challenges related to consecutive interpreting sub-skills are identified and addressed. Stresses effective analysis, note-taking, and use of voice during exercises in sight translation, dialogue, and formal consecutive interpreting.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PG01	Esperanza Pombo Lopez-Barron	Seats (Total: 16)
	Contact instructor or department for details.	

COMM619A Consecutive Interpretation; Methodology

Credits: 2-6 Grading Method: Regular,
Audit

Builds upon the systematic, reflective approach to interpreting in real-world settings introduced in Fundamentals of Interpreting. Consecutive interpreting skills are consolidated through individual and group practice, and any remaining challenges related to consecutive interpreting sub-skills are identified and addressed. Stresses effective analysis, note-taking, and use of voice during exercises in sight translation, dialogue, and formal consecutive interpreting.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XG01	Esperanza Pombo Lopez-Barron	Seats (Total: 16)
	M 2:00pm - 4:15pm	SKN 3118
	<i>Biweekly.</i>	

COMM619B

Credits: 2-6

Builds upon the systematic, reflective approach to interpreting in real-world settings introduced in Fundamentals of Interpreting. Consecutive interpreting skills are consolidated through individual and group practice, and any remaining challenges related to consecutive interpreting sub-skills are identified and addressed. Stresses effective analysis, note-taking, and use of voice during exercises in sight translation, dialogue, and formal consecutive interpreting.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XGA1	Ihab Ali	Seats (Total: 16)
	Sa 2:00pm - 3:15pm	SKN 2127
XGE1	Ihab Ali	Seats (Total: 16)
	Sa 3:30pm - 4:30pm	SKN 2127

COMM619C

Credits: 2-6

Builds upon the systematic, reflective approach to interpreting in real-world settings introduced in Fundamentals of Interpreting. Consecutive interpreting skills are consolidated through individual and group practice, and any remaining challenges related to consecutive interpreting sub-skills are identified and addressed. Stresses effective analysis, note-taking, and use of voice during exercises in sight translation, dialogue, and formal consecutive interpreting.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XGA1	John Samaha Jr	Seats (Total: 16)
	Class time/details on ELMS	ONLINE
XGE1	John Samaha Jr	Seats (Total: 16)
	Class time/details on ELMS	ONLINE

COMM619F

Credits: 2

Credits: 2 Grading Method: Regular, Audit

XGE1	Pascale Kraus	Seats (Total: 16)
	W 3:30pm - 5:30pm	SKN 3118
<i>English into French. Biweekly. Start Date: 09-04.</i>		
XGF1	Pascale Kraus	Seats (Total: 16)
	W 5:30pm - 7:30pm	SKN 3118
<i>French into English. Biweekly. Start Date: 09-04.</i>		

XGE1	Brigitte Andreassier	Seats (Total: 16)
	Class time/details on ELMs	ONLINE
XGF1	Rosalinda Meza-Steel	Seats (Total: 16)
	Sa 2:30pm - 3:30pm	SKN 3117
	Contact instructor or department for details.	
	<i>Biweekly. Start Date: 08-31.</i>	

Relationship of public relations management to organizational structure and communication functions.
Objectives, planning, staffing, budgeting, administering, and evaluation of public relations programs.

0101	Sun Young Lee	Seats (Total: 15)
	M 6:30pm - 9:30pm	SKN 2127

COMM638 Professional Communication: Rhetoric & Voice

Credits: 3 Grading Method: Regular

A skills-based course in speaking instruction in English for professional communicators with a focus on public speaking, voice, diction, and pronunciation. Focuses on developing public speaking, voice, diction, and pronunciation skills. Designed to teach message creation and organization, sentence structure, and language use, vocal qualities designed to enhance proper pronunciation, breathing, and articulation skills, register variation, listening skills, English vocabulary, audience adaptation skills with attention to cultural distinctions, presentational skills with visual aids, and interpretive skills.

PLF1	Misti Yang, Shawn Parry-Giles	Seats (Total: 25)
	Class time/details on ELMs	ONLINE
<i>Must be in Enhanced English Fluency program, Online. For permission to enroll, contact oes@umd.edu.</i>		

COMM639 Fundamentals of Translation

Credits: 2-6 Grading Method: Regular,
Audit

Develops a systematic, reflective approach to translation involving both the written and spoken word. Provides an overview of domains of translation, associated text categories and translation tasks. Develops strategies to identify, analyze and resolve translation challenges in specific, authentic, real-world contexts. Working with a series of current texts, explores general translation concepts and language-specific strategies. Includes sight translation exercises and introduction to translation resources and computer tools used in the translators workplace.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PG01	Eva Vilarrubi	Seats (Total: 30)
	Contact instructor or department for details.	
<i>Meets every other week beginning Sept. 1st.</i>		

COMM639A Fundamentals of Translation; Methodology

Credits: 1 Grading Method: Regular,
Audit

Develops a systematic, reflective approach to translation involving both the written and spoken word. Provides an overview of domains of translation, associated text categories and translation tasks. Develops strategies to identify, analyze and resolve translation challenges in specific, authentic, real-world contexts. Working with a series of current texts, explores general translation concepts and language-specific strategies. Includes sight translation exercises and introduction to translation resources and computer tools used in the translators workplace.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XG01	Eva Vilarrubi	Seats (Total: 16)
	Th 6:00pm - 7:15pm	SKN 3117

COMM639M Fundamentals of Translation; Translation: Spanish into English/English into Spanish

Credits: 1 Grading Method: Regular,
 Audit

Develops a systematic, reflective approach to translation involving both the written and spoken word. Provides an overview of domains of translation, associated text categories and translation tasks. Develops strategies to identify, analyze and resolve translation challenges in specific, authentic, real-world contexts. Working with a series of current texts, explores general translation concepts and language-specific strategies. Includes sight translation exercises and introduction to translation resources and computer tools used in the translators workplace.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XGE1	Eva Vilarrubi	Seats (Total: 16)
	Tu 4:30pm - 5:30pm	SKN 3117
	<i>English into Spanish.</i>	
XGS1	Joseph Mazza	Seats (Total: 16)
	Tu 7:00pm - 8:50pm	Location: TBA
	<i>Spanish into English. Biweekly. Start Date 09-03. Located in PLS 1176.</i>	

COMM639N Fundamentals of Translation; Sight Translation: Spanish into English/English into Spanish

Credits: 1 Grading Method: Regular,
 Audit

Develops a systematic, reflective approach to translation involving both the written and spoken word. Provides an overview of domains of translation, associated text categories and translation tasks. Develops strategies to identify, analyze and resolve translation challenges in specific, authentic, real-world contexts. Working with a series of current texts, explores general translation concepts and language-specific strategies. Includes sight translation exercises and introduction to translation resources and computer tools used in the translators workplace.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XGE1	Rosalinda Meza-Steel	Seats (Total: 16)
	Sa 3:30pm - 4:30pm	SKN 3117
<i>English into Spanish. Biweekly. Start Date: 08-31.</i>		
XGS1	Rosalinda Meza-Steel	Seats (Total: 16)
	Sa 10:30am - 11:30am	SKN 3117
<i>Spanish into English. Biweekly.</i>		

COMM652 Contemporary Rhetorical Theory

Credits: 3 Grading Method: Regular,
 Audit

Formerly: SPCH652.

A study of twentieth century theories of rhetoric. Special attention will be devoted to Richard Weaver, Kenneth Burke, Lloyd Bitzer, Ernest Bormann, Walter Fisher, and the continental theorists of communication such as Chaim Perelman and Jurgen Habermas.

0101	Damien Pfister	Seats (Total: 15)
	W 6:30pm - 9:30pm	SKN 2127

COMM659 Translation for Language-Specific Markets

Credits: 1-3 Grading Method: Regular,
 Audit

Builds translation skills to a highly professional level by developing autonomy in completing authentic, real-world translation projects based upon the reflective approach developed in the first-year curriculum. Develops one or more specializations. Completion of individual and group projects covering all aspects of professional translation from subject matter research, terminology work, and use of computer-assisted translation tools. Sight translation and timed exercises to increase production and meet deadlines.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PG01	Esperanza Pombo Lopez-Barron	Seats (Total: 30)
	M 9:00am - 10:50am	SKN 3118
<i>Meets twice per semester: 08-26 and 11-04.</i>		

COMM679 Professional Practice Forum in Translation: Workplace Processes and Procedures; Workplace Processing and Procedures Translation

Credits: 1 Grading Method: Regular,
Audit

Provides in-depth exploration of processes and procedures in public service, legal, and political settings requiring translation services. Prepares for translation in real-world settings by discussing procedures across sectors and institutions, enabling informed career plans and choices. Discusses ethics, professional conduct and business practices. Reinforces identity as a professional translator, develops specializations, and pursues professional and career development opportunities through interaction with members of the profession, professional organizations, and institutions in the language industry.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PG01	Stephen Lank	Seats (Total: 30)
	W 8:30am - 10:30am	SKN 3117
<i>Biweekly. Start Date 08-28.</i>		

COMM686 Teaching Communication

Credits: 1 Grading Method: Regular,
Audit

Formerly: SPCH686.

Principles of effective teaching--content and process--in the college communication classroom.

0101	Lindsey Anderson	Seats (Total: 30)
	W 12:00pm - 1:00pm	SKN 2127

COMM688 Communication Field Experience

(Perm req)

Credits: 1-6 Grading Method: Regular,
Audit

Applications of communication principles and research in professional communication settings.

Contact department for information to register for this course.

COMM698 Special Problems in Communication

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

Contact department for information to register for this course.

COMM700 Introduction to Graduate Study in Communication

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in Communication (Doctoral) program. Formerly: SPCH700.

Basic skills in communication research.

0101	Trevor Parry-Giles	Seats (Total: 30)
	Tu 6:30pm - 9:30pm	SKN 2127

COMM712 Advanced Historical/Critical Methods in Communication Research

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: COMM711. Restriction: Permission of instructor. Formerly: SPCH712.

Critical assessment of qualitative approaches to communication. Introduction to significant schools of historical and critical research. Advanced techniques for inquiry and manuscript preparation. Students must have dissertation research project requiring historical or critical method.

0101	Catherine Steele	Seats (Total: 15)
	Th 3:30pm - 6:30pm	SKN 2127

COMM713 Translation Technology

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Admissions test for second year courses; and permission of ARHU-Communication department.

Builds upon the principles outlined in Introduction to Computer-Assisted Translation to develop comprehensive knowledge of the current and future roles of technology in translation processes involving both the spoken and the written word, including use of widely available software tools and systems for terminology management, translation memory, and machine translation. Students carry out projects using translation technology, enabling them to apply newly acquired knowledge in applied contexts. Examination of case studies highlights how translation technology is leveraged across public and private sector organizations and the latest developments in the field.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

Click here for program information.

PG01	Jon Ritzdorf	Seats (Total: 16)
	Tu 9:00am - 1:30pm	SKN 3115
	<i>Course starts 09-10.</i>	

COMM714 Introduction to Qualitative Methods in Communication Research

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of instructor.

Methods for field research in communication including interviewing, ethnographic and participant intervention, focus groups, and content analysis. Formulation of significant research questions, systematic collection of field data, formulating substantial claims from the research, organizing and writing research from disciplinary outlets.

0101	Elizabeth Toth	Seats (Total: 15)
	W 3:30pm - 6:30pm	SKN 2127

COMM715 Advanced Qualitative Methods in Communication Research

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: COMM714; or students who have taken courses with comparable content may contact the department.

Advanced data analysis of qualitative data in Communication research. In-field research and techniques for analysis of data from in-field work.

0101	Lindsey Anderson	Seats (Total: 15)
	W 3:30pm - 6:30pm	SKN 3117

COMM719 Advanced Consecutive Interpretation

Credits: 2-3 Grading Method: Regular,
Audit

Builds consecutive interpreting skills to a highly professional level by sharpening listening, processing, memory, note-taking, and delivery skills, enabling interpretation of highly complex material requiring particular attention to nuance, tone, and style. Includes dialogue and monologue interpreting exercises with specialized subject material. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PG01	Esperanza Pombo Lopez-Barron	Seats (Total: 30)
Contact instructor or department for details.		

COMM719A Advanced Consecutive Interpretation; Arabic into English/English into Arabic

Credits: 1 Grading Method: Regular,
 Audit

Builds consecutive interpreting skills to a highly professional level by sharpening listening, processing, memory, note-taking, and delivery skills, enabling interpretation of highly complex material requiring particular attention to nuance, tone, and style. Includes dialogue and monologue interpreting exercises with specialized subject material. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

XGA1	Ihab Ali	Seats (Total: 16)
	Sa 4:30pm - 5:30pm	SKN 2127
<i>Arabic into English.</i>		
XGE1	Ihab Ali	Seats (Total: 16)
	Sa 5:30pm - 6:30pm	SKN 2127
<i>English into Arabic.</i>		

COMM719B Advanced Consecutive Interpretation; Chinese into English/English into Chinese

Credits: 1 Grading Method: Regular,
 Audit

Builds consecutive interpreting skills to a highly professional level by sharpening listening, processing, memory, note-taking, and delivery skills, enabling interpretation of highly complex material requiring particular attention to nuance, tone, and style. Includes dialogue and monologue interpreting exercises with specialized subject material. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

XGC1	Min Eu	Seats (Total: 16)
	Th 10:30am - 12:30pm	SKN 3117
<i>Chinese into English. Meets Biweekly. Start Date: 08-27.</i>		
XGE1	Min Eu	Seats (Total: 16)
	Th 10:30am - 12:30pm	SKN 3117
<i>English into Chinese. Meets Biweekly. Start Date: 08-27.</i>		

COMM719E Advanced Consecutive Interpretation; Spanish into Russian/Russian into Spanish

Credits: 1 Grading Method: Regular,
 Audit

Builds consecutive interpreting skills to a highly professional level by sharpening listening, processing, memory, note-taking, and delivery skills, enabling interpretation of highly complex material requiring particular attention to nuance, tone, and style. Includes dialogue and monologue interpreting exercises with specialized subject material. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

XGS1	Sergei Chernov	Seats (Total: 16)
	Sa 12:30pm - 1:30pm	SKN 3118
Spanish into Russian. Weekly. Start Date: 08-31.		

COMM719G Advanced Consecutive Interpretation; Advanced Consecutive Interpretation; Korean into English/English into Korean

Credits: 1 Grading Method: Regular,
 Audit

Builds consecutive interpreting skills to a highly professional level by sharpening listening, processing, memory, note-taking, and delivery skills, enabling interpretation of highly complex material requiring particular attention to nuance, tone, and style. Includes dialogue and monologue interpreting exercises with specialized subject material. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

XGE1	Lee Boese	Seats (Total: 16)
	Sa 1:00pm - 3:10pm	ONLINE
English into Korean. Weekly. Start Date: TBA		
XGK1	Lee Boese	Seats (Total: 16)
	Sa 10:00am - 12:10pm	ONLINE
Korean into English. Weekly. Start Date: TBA.		

COMM719R Advanced Consecutive Interpretation; Russian into English/English into Russian

Credits: 1 Grading Method: Regular,
 Audit

Builds consecutive interpreting skills to a highly professional level by sharpening listening, processing, memory, note-taking, and delivery skills, enabling interpretation of highly complex material requiring particular attention to nuance, tone, and style. Includes dialogue and monologue interpreting exercises with specialized subject material. Participants emerge from the course as reflective practitioners with the simultaneous interpreting skills required to perform competently in real-world settings.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XGE1	Nikolai Sorokin	Seats (Total: 16)
	Tu 1:00pm - 3:15pm	SKN 3118
<i>English into Russian. Meets biweekly, start date 08-27.</i>		
XGR1	Nikolai Sorokin	Seats (Total: 16)
	Tu 3:30pm - 5:30pm	SKN 3118
<i>Russian into English. Meets biweekly, start date 08-27.</i>		

COMM729 Simultaneous Interpretation

Credits: 2-3 Grading Method: Regular,
Audit

Builds upon the discussion of the simultaneous mode and exercises in Introduction to Simultaneous Interpreting by reviewing the relationship between consecutive and simultaneous skills and introducing work in the booth in a series of progressive exercises. Addresses challenges such as coordination of split attention, ear-voice span, memory and delivery / presentation. Reinforces principles of collegial teamwork and good microphone technique in the booth. Enhances preparation skills required for interpretation of specialized subject matter.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PG01	Esperanza Pombo Lopez-Barron	Seats (Total: 16)
Contact instructor or department for details.		

COMM729A Simultaneous Interpretation; Simultaneous Interpretation; English into Arabic/Arabic into English

Credits: 1 Grading Method: Regular,
Audit

Builds upon the discussion of the simultaneous mode and exercises in Introduction to Simultaneous Interpreting by reviewing the relationship between consecutive and simultaneous skills and introducing work in the booth in a series of progressive exercises. Addresses challenges such as coordination of split attention, ear-voice span, memory and delivery / presentation. Reinforces principles of collegial teamwork and good microphone technique in the booth. Enhances preparation skills required for interpretation of specialized subject matter.

XGA1	Ihab Ali	Seats (Total: 16)
Contact instructor or department for details.		
<i>Arabic into English.</i>		

XGE1	Ihab Ali	Seats (Total: 16)
	Contact instructor or department for details.	
	<i>English into Arabic.</i>	

COMM729B Simultaneous Interpretation; Simultaneous Interpretation; English into Chinese/Chinese into English

Credits: 1 Grading Method: Regular,
 Audit

Builds upon the discussion of the simultaneous mode and exercises in Introduction to Simultaneous Interpreting by reviewing the relationship between consecutive and simultaneous skills and introducing work in the booth in a series of progressive exercises. Addresses challenges such as coordination of split attention, ear-voice span, memory and delivery / presentation. Reinforces principles of collegial teamwork and good microphone technique in the booth. Enhances preparation skills required for interpretation of specialized subject matter.

XGC1	Ruby Lai	Seats (Total: 16)
	F 11:15am - 1:15pm	SKN 3118
	<i>Chinese into English. Biweekly. The first two meetings 09-06 and 09-13.</i>	
XGE1	Ruby Lai	Seats (Total: 16)
	F 9:00am - 11:10am	SKN 3118
	<i>English into Chinese. Biweekly. The first two meetings 09-06 and 09-13.</i>	

COMM729E Simultaneous Interpretation; Spanish into Russian/Russian into Spanish

Credits: 1 Grading Method: Regular,
 Audit

Builds upon the discussion of the simultaneous mode and exercises in Introduction to Simultaneous Interpreting by reviewing the relationship between consecutive and simultaneous skills and introducing work in the booth in a series of progressive exercises. Addresses challenges such as coordination of split attention, ear-voice span, memory and delivery / presentation. Reinforces principles of collegial teamwork and good microphone technique in the booth. Enhances preparation skills required for interpretation of specialized subject matter.

XGS1	Sergei Chernov	Seats (Total: 16)
	Sa 2:30pm - 3:30pm	SKN 3118
	<i>Spanish into Russian.</i>	

COMM729K Simultaneous Interpretation; Simultaneous Interpretation; Korean into English/English into Korean

Credits: 1 Grading Method: Regular, Audit

Builds upon the discussion of the simultaneous mode and exercises in Introduction to Simultaneous Interpreting by reviewing the relationship between consecutive and simultaneous skills and introducing work in the booth in a series of progressive exercises. Addresses challenges such as coordination of split attention, ear-voice span, memory and delivery / presentation. Reinforces principles of collegial teamwork and good microphone technique in the booth. Enhances preparation skills required for interpretation of specialized subject matter.

XGE1	Yong-Ha Lee	Seats (Total: 16)
	M 10:00am - 12:10pm	SKN 3118
	<i>English into Korean. Biweekly. Start Date: 09-16.</i>	
XGK1	Yong-Ha Lee	Seats (Total: 16)
	M 12:10pm - 2:10pm	SKN 3118
	<i>Korean into English. Biweekly. Start Date: 09-16.</i>	

COMM729R Simultaneous Interpretation; Russian into English/English into Russian

Credits: 1 Grading Method: Regular,
Audit

Builds upon the discussion of the simultaneous mode and exercises in Introduction to Simultaneous Interpreting by reviewing the relationship between consecutive and simultaneous skills and introducing work in the booth in a series of progressive exercises. Addresses challenges such as coordination of split attention, ear-voice span, memory and delivery / presentation. Reinforces principles of collegial teamwork and good microphone technique in the booth. Enhances preparation skills required for interpretation of specialized subject matter.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

XGE1	Sergei Chernov	Seats (Total: 16)
	Sa 4:00pm - 5:15pm	SKN 3118
	<i>English into Russian.</i>	
XGR1	Nikolai Sorokin	Seats (Total: 16)
	Tu 10:00am - 12:15pm	SKN 3118
	<i>Russian into English. Meets biweekly, start date 08-27.</i>	

COMM759 Professional Practice Forum in Interpreting: Practicum

Credits: 1 Grading Method: Regular,
Audit

Provides opportunities to interpret consecutively and simultaneously in real-world settings on campus and in the public service, legal, business, and political communities. Develops team leader skills by organizing and convening an event or series of events (conference, debate, or negotiation), selecting topics and delegates, and preparing speeches and arguments to deliver and interpret. Collaboration with participants in M.A. translation courses is sought. Requires independent study plan agreed with course instructor.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PG01	Esperanza Pombo Lopez-Barron	Seats (Total: 30)
	M 9:00am - 10:50am	SKN 3118
	<i>Meets twice per semester: 08-26 and 11-04.</i>	

COMM769

Professional Practice Forum in Interpreting: Workplace Processes and Procedures; Workplace Processes and Procedures Interpreting

Credits: 1 Grading Method: Regular, Audit

Provides in-depth exploration of processes and procedures in public service, legal, and political settings where interpreting services are commonplace. Enables students to make informed career plans and choices. Empowers participants by helping to establish and reinforce identity as a professional interpreter, develop specializations, and pursue professional and career development opportunities through interaction with members of the profession, professional organizations, and institutions in the language industry.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PG01	Miriam Stanicic	Seats (Total: 30)
	Sa 8:30am - 10:30am	SKN 3118
	<i>Biweekly. Start Date: 09/14.</i>	

COMM789

Seminar: Special Topics in Intercultural Communication; Advanced Intercultural Communications/Negotiations

Credits: 3 Grading Method: Regular,
Audit

Explores special topic areas within the study of intercultural communication, such as culture and conflict, intercultural negotiation, cross-cultural relationships.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PG01	Lauren Edelstein	Seats (Total: 30)
	Th 1:00pm - 3:30pm	SKN 3118
	<i>Weekly. Start Date 08-29.</i>	

COMM798

Independent Study

(Perm req)

Credits: 1-3

Grading Method: Regular,
Audit

An individual course designed for intensive study or research of problems in communication.

Contact department for information to register for this course.

COMM798A

Independent Study; Public Speaking

Credits: 1-3

Grading Method: Regular,
Audit

An individual course designed for intensive study or research of problems in communication.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PG01	Andrew Wolvin	Seats (Total: 16)
	Th 1:00pm - 2:50pm	SKN 2127
XG01	Cassondra Pope	Seats (Total: 16)
	Th 3:00pm - 3:50pm	SKN 3117
	Contact instructor or department for details.	
	<i>Public Speaking: Diction Weekly. Plus 1 make up session on TBA date.</i>	

COMM798B

Independent Study; Text Analysis and Intensive Writing

Credits: 1-2

Grading Method: Regular,
Audit

An individual course designed for intensive study or research of problems in communication.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PG01	Mollie Kaufer, Shawn Parry-Giles	Seats (Total: 16)
	Tu 5:30pm - 6:30pm	Location: TBA
	<i>Taught in English.</i>	

COMM798E Independent Study; Independent Study: Website Localization and Software

Credits: 2 Grading Method: Regular,
 Audit

An individual course designed for intensive study or research of problems in communication.

PG01	Jon Ritzdorf	Seats (Total: 16)
	M 5:00pm - 8:00pm	SKN 3115

COMM798F Independent Study; English Fluency Enhancement

Credits: 1-3 Grading Method: Regular,
 Audit

An individual course designed for intensive study or research of problems in communication.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PG01	Mollie Kaufer, Shawn Parry-Giles	Seats (Total: 16)
	Contact instructor or department for details.	
	<i>Meets by appointment.</i>	

COMM798I Independent Study; Consecutive Interpreting Skills

Credits: 1-2 Grading Method: Regular,
 Audit

An individual course designed for intensive study or research of problems in communication.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PG01	Esperanza Pombo Lopez-Barron	Seats (Total: 16)
	Contact instructor or department for details.	

COMM798J Independent Study; Translation Skills

Credits: 1-2 Grading Method: Regular,
 Audit

An individual course designed for intensive study or research of problems in communication.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PG01	Esperanza Pombo Lopez-Barron	Seats (Total: 16)
Contact instructor or department for details.		

COMM798L Independent Study; Arabic Fluency Enhancement

Credits: 3 Grading Method: Regular,
Audit

An individual course designed for intensive study or research of problems in communication.

Must be in Graduate Studies in Translation and Interpreting program. For permission to enroll, contact oes@umd.edu.

PG01	Mollie Kaufer	Seats (Total: 16)
Contact instructor or department for details.		

COMM798M Independent Study; Spanish Writing

Credits: 1 Grading Method: Regular,
Audit

An individual course designed for intensive study or research of problems in communication.

PG01	Eva Vilarrubi	Seats (Total: 16)
	W 4:00pm - 6:15pm	SKN 3118

COMM799 Master's Thesis Research

(Perm req) Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

COMM888 Doctoral Practicum in Communication

(Perm req) Credits: 3-9 Grading Method: Regular,
Audit

Analysis of professional activity through personal observation. Evaluation of the purpose, process, effectiveness, and efficiency of professional activity. Recommendations for training and further research.

Contact department for information to register for this course.

COMM889 Doctoral Tutorial in Communication

(Perm req) Credits: 3-9 Grading Method: Regular,
Audit

Individual research in communication.

Contact department for information to register for this course.

COMM898 Pre-Candidacy Research

(Perm req)

Credits: 1-8

Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

COMM899 Doctoral Dissertation Research

(Perm req)

Credits: 6

Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

CPBE College Park Scholars-Business, Society, and Economy

Fall 2019

CPBE100 College Park Scholars: Business, Society & the Economy First-Year Colloquium

Credits: 1

Grading Method: Regular

Restriction: Students must be matriculated into the College Park Scholars Business, Society & the Economy (CPBE) program.

Introductory colloquium: Examination of issues related to business, society and the economy.

0101	Claudia Donnelly	Seats (Total: 45)	
	Tu 5:00pm - 5:50pm	ESJ 1202	
	Tu 6:00pm - 6:50pm	ESJ 1202	Lab
0201	Claudia Donnelly	Seats (Total: 45)	
	Tu 5:00pm - 5:50pm	ESJ 1202	
	Tu 6:00pm - 6:50pm	ESJ 1202	Lab

CPBE225 Enterprise Communications

Credits: 3

Grading Method: Regular, Pass-Fail, Audit

General Education: FSOC

Prerequisite: CPBE100. Restriction: Must be enrolled in College Park Scholars' Business, Society and the Economy (CPBE) program. Formerly: CPSP220.

Examines basic interpersonal communication processes within written and oral channels, with practical applications for the business environment.

0101	Ira Koretsky	Seats (Total: 37)	
	MW 11:00am - 12:15pm	SQH 1103	
	W 5:00pm - 6:50pm	SQH 1120	Lab
0102	Ira Koretsky, Mark Wellman	Seats (Total: 36)	
	MW 9:30am - 10:45am	SQH 1103	
	W 5:00pm - 6:50pm	SQH 1120	Lab

CPET

College Park Scholars- Environment, Technology & Economy

Fall 2019

CPET100

College Park Scholars: Environment, Technology & Economy First-Year Colloquium I

Credits: 1

Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Environment, Technology & Economy (CPET) program.

Introductory colloquium: Examination of issues related to the convergence of the environment, technology and the economy.

Class will meet in lecture OR discussion each week. For the first class meeting, both sections meet in LECTURE. Students will then be given schedule for semester.

0101	Timothy Knight	Seats (Total: 32)	
	Tu 5:10pm - 6:30pm	CCC 1205	
	Tu 4:00pm - 4:50pm	Location: TBA	Discussion
0102	Timothy Knight	Seats (Total: 32)	
	Tu 5:10pm - 6:30pm	CCC 1205	
	Tu 5:00pm - 5:50pm	Location: TBA	Discussion
0103	Timothy Knight	Seats (Total: 32)	
	Tu 5:10pm - 6:30pm	CCC 1205	
	Tu 6:00pm - 6:50pm	Location: TBA	Discussion

CPET200

College Park Scholars: Environment, Technology & Economy Second-Year Colloquium

Credits: 1

Grading Method: Regular

Prerequisite: CPET101. Restriction: Students must be enrolled in the College Park Scholars Environment, Technology & Economy (CPET) program.

Advanced colloquium: Continued examination of issues related to sustainable development.

0101	Timothy Knight W 5:10pm - 6:30pm W 4:00pm - 4:50pm	Seats (Total: 32) CCC 1100 Location: TBA Discussion
0102	Timothy Knight W 5:10pm - 6:30pm W 5:00pm - 5:50pm	Seats (Total: 32) CCC 1100 Location: TBA Discussion
0103	Timothy Knight W 5:10pm - 6:30pm W 6:00pm - 6:50pm	Seats (Total: 32) CCC 1100 Location: TBA Discussion

CPGH

**College Park Scholars-Global
Public Health**

Fall 2019

CPGH100 College Park Scholars: Global Public Health First-Year Colloquium I

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Global Public Health (CPGH) program.

Introductory colloquium: Examination of factors that determine the health status of populations around the world.

0101	Deena Farrukh, Reva Datar, Roohali Sukhavasi, Muhiuddin Haider W 3:00pm - 4:30pm	Seats (Total: 96) CCC 1100
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CPGH200 College Park Scholars: Global Public Health Second-Year Colloquium

Credits: 1 Grading Method: Regular General Education: DSSP

Prerequisite: CPGH101. Restriction: Students must be enrolled in the College Park Scholars Global Public Health (CPGH) program.

Building on knowledge and skills gained from the first-year colloquia, students will develop public health interventions that address a public health issue of a particular community.

0101	Reva Datar, Deena Farrukh, Muhiuddin Haider, Roohali Sukhavasi Tu 2:00pm - 3:15pm	Seats (Total: 95) CCC 1100
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CPJT100**College Park Scholars: Justice & Legal Thought: First-Year Colloquium**

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Justice & Legal Thought (CPJT) program.

Students will gain an experiential understanding of law and justice by investigating concepts and frameworks of justice and apply them to real-world experience.

0101	Erica Smith	Seats (Total: 90)
	W 5:00pm - 6:15pm	CCC 1205

CPJT200**Justice and legal Thought Second Year Colloquium**

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Justice and Legal Thought (CPJT) program. Additional information: When combined with the first year CPJT colloquia, students will learn how to research issues discussed and debated throughout year one.

Advanced colloquium for second year students related to research skill development

0101	Erica Smith	Seats (Total: 90)
	Th 2:00pm - 3:15pm	CCC 1100

CPMS100**College Park Scholars: Media, Self & Society First-Year Colloquium I**

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Media, Self & Society (CPMS) program.

Introductory colloquium: Examination of issues related to the media.

0101	Mary Burns, Kelly Brower	Seats (Total: 90)
	Tu 3:30pm - 4:45pm	CCC 1205

CPMS225**Analyzing Media Practice through Theory**

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit SCIS

*Prerequisite: CPMS100. Restriction: Must be in the Scholars Media, Self & Society Program.
Formerly: CPSP222.*

Media analysis investigating patterns of ownership, the working of media organizations, patterns of coverage and the nature of audiences.

0101	Mary Burns, Kelly Brower	Seats (Total: 90)
	TuTh 12:30pm - 1:45pm	CCC 1205

CPMS230 College Park Scholars: Media, Self & Society - Internship Practicum

Credits: 1-3 Grading Method: Regular

Prerequisite: CPMS101. Restriction: Students must be enrolled in the College Park Scholars Media, Self & Society (CPMS) program.

Supervised internship project in an area related to media, self and society.

0101	Mary Burns, Kelly Brower	Seats (Total: 10)
	Contact instructor or department for details.	

CPPL College Park Scholars-Public Leadership Fall 2019

CPPL100 College Park Scholars: Public Leadership First-Year Colloquium I

Credits: 1 Grading Method: Regular General Education: DVCC

Restriction: Students must be enrolled in the College Park Scholars Public Leadership (CPPL) program.

Introductory colloquium: Examination of issues related to public leadership.

0101	Ricco Hall	Seats (Total: 28)
	Tu 5:00pm - 6:15pm	CCC 1111
0201	Ricco Hall	Seats (Total: 28)
	Tu 6:30pm - 7:45pm	CCC 1111
0301	Ricco Hall	Seats (Total: 28)
	W 5:00pm - 6:15pm	CCC 1111

CPPL200 College Park Scholars: Public Leadership - Applied Leadership Capstone I

Credits: 1 Grading Method: Regular

Prerequisite: CPPL101. Restriction: Students must be enrolled in the College Park Scholars Public Leadership (CPPL) program.

Planning and initiation of team, community-based-learning projects.

0101	Mathew Feehan	Seats (Total: 70)
	W 5:00pm - 6:15pm	ESJ 2204

CPSA College Park Scholars-Arts Fall 2019

CPSA100 College Park Scholars: Arts First-Year Colloquium I

Credits: 1 Grading Method: Regular

Restriction: Students must be matriculated into the College Park Scholars Arts (CPSA) program.

Introductory colloquium: Aesthetic, intellectual and personal examination of the arts.

0101	Heather-Erin Bremenstuhl, Kenna Hernly, Harold Burgess	Seats (Total: 25)
	M 6:00pm - 7:15pm	CCC 1100
	Contact instructor or department for details.	
0102	Kenna Hernly, Heather-Erin Bremenstuhl, Harold Burgess	Seats (Total: 25)
	M 6:00pm - 7:15pm	CCC 1100
	Contact instructor or department for details.	
0103	Kenna Hernly, Heather-Erin Bremenstuhl, Harold Burgess	Seats (Total: 25)
	M 6:00pm - 7:15pm	CCC 1100
	Contact instructor or department for details.	

CPSA149 College Park Scholars: Arts Service-Learning Outreach

Credits: 2 Grading Method: Regular

Service-Learning outreach to Prince George's County schools and non-profit agencies.

0101	Harold Burgess	Seats (Total: 10)
	Th 5:00pm - 7:00pm	CCC 1115

CPSA200 College Park Scholars: Arts Second-Year Colloquium I

Credits: 1 Grading Method: Regular

Prerequisite: CP5A101. Restriction: Students must be matriculated into the College Park Scholars Arts (CP5A) program. Additional information: When paired with successful completion of CP5A 240, 250 or 260, students will earn General Education Scholarship-in-Practice credit.

Advanced colloquium I: Examination of the arts in society; and preparation for "Scholarship-in-Practice" project.

0101	Heather-Erin Bremenstuh1, Harold Burgess	Seats (Total: 22)
	Tu 6:00pm - 7:15pm	CCC 1100
	Contact instructor or department for details.	
0102	Kenna Hernly, Heather-Erin Bremenstuh1, Harold Burgess	Seats (Total: 22)
	Tu 6:00pm - 7:15pm	CCC 1100
	Contact instructor or department for details.	
0103	Kenna Hernly, Heather-Erin Bremenstuh1, Harold Burgess	Seats (Total: 22)
	Tu 6:00pm - 7:15pm	CCC 1100
	Contact instructor or department for details.	

CP5D

College Park Scholars-Science, Discovery & the Universe

Fall 2019

CP5D100

College Park Scholars: Science, Discovery & the Universe First-Year Colloquium A

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Science, Discovery & the Universe (CP5D) program. Additional information: Both freshman colloquia (CP5D 100 and 101) are required for students to earn their College Park Scholars citations; however, they can be taken in any order during a student's first year.

Introductory colloquium: Examination of issues related to science, discovery and the universe.

0101	Erin Thomson, Alan Peel, Jennifer Lee	Seats (Total: 45)
	Th 3:30pm - 4:30pm	CCC 1111

CP5D101

College Park Scholars: Science, Discovery & the Universe First-Year Colloquium B

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Science, Discovery & the Universe (CPSD) program. Additional information: Both freshman colloquia (CPSD 100 and 101) are required for students to earn their College Park Scholars citations; however, they can be taken in any order during a student's first year.

Introductory colloquium: Examination of the intersection of astronomy and culture; and the roles of science, exploration and communication in the process of discovery.

0101	Erin Thomson, Alan Peel, Jennifer Lee	Seats (Total: 45)
	Th 3:30pm - 4:30pm	CCC 1205

CPSD200 College Park Scholars: Science, Discovery & the Universe Second-Year Colloquium

Credits: 1 Grading Method: Regular

Prerequisite: CPSD100 and CPSD101. Restriction: Students must be enrolled in the College Park Scholars Science, Discovery & the Universe (CPSD) program.

Advanced colloquium: Continued examination of issues related to science, discovery and the universe.

0101	Erin Thomson, Alan Peel, Jennifer Lee	Seats (Total: 85)
	Th 5:30pm - 6:30pm	CCC 1205

CPSF College Park Scholars-Life Sciences Fall 2019

CPSF100 College Park Scholars: Life Sciences First-Year Colloquium I

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Life Sciences (CPSF) program.

Introductory colloquium: Examination of issues related to the life sciences.

0101	Jimmy McClellan, Beth Parent	Seats (Total: 100)
	W 3:30pm - 5:30pm	PLS 1140

CPSG College Park Scholars-Science and Global Change Fall 2019

CPSG100 College Park Scholars: Science & Global Change First-Year Colloquium I

Credits: 1 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Science & Global Change (CPSG) program.

Introductory colloquium: Examination of issues related to science and global change.

0101	Thomas Holtz	Seats (Total: 92)
	Tu 3:30pm - 4:50pm	CCC 1100

CPSG200 College Park Scholars: Science & Global Change Second-Year Colloquium

Credits: 1 Grading Method: Regular

Prerequisite: CPSG101. Restriction: Students must be enrolled in the College Park Scholars Science & Global Change (CPSG) program.

Advanced colloquium: Continued examination of issues related to science and global change.

0101	Thomas Holtz, John Merck	Seats (Total: 90)
	M 3:30pm - 4:50pm	CCC 1100

CPSN College Park Scholars- International Studies Fall 2019

CPSN100 College Park Scholars: International Studies First-Year Colloquium I

Credits: 2 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars International Studies (CPSN) program.

Introductory colloquium: Examination of issues related to international studies.

0101	Sean Rao, Diana Partridge, Neil Lund, Robert Campana, James Glass, Seo Chung	Seats (Total: 25)
	M 4:45pm - 6:45pm	ASY 2203
	M 6:45pm - 8:00pm	ASY 3211 Discussion
0102	James Glass, Robert Campana, Neil Lund, Diana Partridge, Sean Rao, Seo Chung	Seats (Total: 22)
	M 4:45pm - 6:45pm	ASY 2203
	M 6:45pm - 8:00pm	ASY 3217 Discussion
0103	James Glass, Seo Chung, Sean Rao, Diana Partridge, Neil Lund, Robert Campana	Seats (Total: 25)
	M 4:45pm - 6:45pm	ASY 2203
	M 6:45pm - 8:00pm	ASY 3221 Discussion

0104	Neil Lund, Robert Campana, James Glass, Diana Partridge, Seo Chung, Sean Rao			Seats (Total: 22)
	M 4:45pm - 6:45pm		ASY 2203	
	M 6:45pm - 8:00pm		ASY 3203	Discussion

CPSN230

College Park Scholars: International Studies - Internship Practicum

Credits: 3 Grading Method: Regular

Prerequisite: CPSN101. Restriction: Students must be enrolled in the College Park Scholars International Studies (CPSN) program.

Supervised internship project in an area related to international studies.

0101	Instructor: TBA	Seats (Total: 10)
Contact instructor or department for details.		

CPSP

College Park Scholars Program

Fall 2019

CPSP218L

College Park Scholars Second-Year Colloquium I; Life Sciences

(Perm req)

Credits: 1 Grading Method: Regular

Colloquium for specific College Park Scholars Program.

Restricted to College Park Scholars - Life Sciences. First lecture of the semester for all sections (including those listed as TBA) will meet on Tuesday, September 2nd, from 4pm-5pm. Location TBA.

0101	Reid Compton	Seats (Total: 25)
	Meets September 3, 2019 - October 15, 2019	
	Tu 4:00pm - 5:50pm	PLS 1119
0201	Beth Parent	Seats (Total: 25)
	Meets August 29, 2019 - October 10, 2019	
	Th 4:00pm - 5:50pm	PLS 1146
0301	Kimberly Paczolt	Seats (Total: 25)
	Meets October 22, 2019 - December 3, 2019	
	Tu 4:00pm - 5:50pm	PLS 1146

0401	Lee Friedman	Seats (Total: 25)
	Meets October 17, 2019 - December 5, 2019	
	Th 4:00pm - 5:50pm	PLS 1119

CPSP239A Practicum: Internship

Credits: 1 Grading Method: Regular

Supervised internship in interest area related to the theme of the students' College Park Scholars program.

0101	Harold Burgess, Heather-Erin Bremenstuhl	Seats (Total: 10)
	Contact instructor or department for details.	

CPSP239L Practicum: Internship

Credits: 1 Grading Method: Regular

Supervised internship in interest area related to the theme of the students' College Park Scholars program.

Contact department for information to register for this course.

CPSP239P Practicum: Internship; Individual Practicum

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Supervised internship in interest area related to the theme of the students' College Park Scholars program.

0101	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	

CPSP239S Practicum: Internship

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Supervised internship in interest area related to the theme of the students' College Park Scholars program.

Contact department for information to register for this course.

CPSP249L Practicum: Service-Learning; Life Sciences

Credits: 2 Grading Method: Regular

Supervised Service-Learning project in area related to the theme of the students' College Park Scholars program.

Restricted to College Park Scholars - Life Sciences.

0101	Beth Parent	Seats (Total: 20)
Contact instructor or department for details.		

CPSP249P Practicum: Service-Learning

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Supervised Service-Learning project in area related to the theme of the students' College Park Scholars program.

0101	Kelly Brower	Seats (Total: 1)
Contact instructor or department for details.		

CPSP259I Practicum: Research

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Supervised research project in interest area related to the students' College Park Scholars program.

Contact department for information to register for this course.

CPSP259J Practicum: Research; Media, Self, and Society

Credits: 1-2 Grading Method: Regular

Supervised research project in interest area related to the students' College Park Scholars program.

Restricted to students in College Park Scholars Media, Self, and Society Program

Contact department for information to register for this course.

CPSP259S Practicum: Research

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Supervised research project in interest area related to the students' College Park Scholars program.

Contact department for information to register for this course.

CPSP269B Practicum: Peer Teaching

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Supervised peer teaching in students' College Park Scholars program.

Contact department for information to register for this course.

CPSP269E Practicum: Peer Teaching

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Supervised peer teaching in students' College Park Scholars program.

Contact department for information to register for this course.

CPSP269F Practicum: Peer Teaching

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Supervised peer teaching in students' College Park Scholars program.

Contact department for information to register for this course.

CPSP269N Practicum: Peer Teaching

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Supervised peer teaching in students' College Park Scholars program.

Contact department for information to register for this course.

CPSP318B College Park Scholars Special Topics; Business, Society and Economics
(Perm req)

Credits: 1 Grading Method: Regular

Special Topics learning opportunities in College Park Scholars.

Contact department for information to register for this course.

CPSP318N College Park Scholars Special Topics

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Special Topics learning opportunities in College Park Scholars.

Contact department for information to register for this course.

CPSP339 Advanced Practicum: Internship

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSSP

Independent study designed for students who wish to extend in greater depth and detail projects begun in sophomore year. Subject varies. Overseen by faculty director or mentor.

Contact department for information to register for this course.

CPSP339P Advanced Practicum: Internship

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSSP

Independent study designed for students who wish to extend in greater depth and detail projects begun in sophomore year. Subject varies. Overseen by faculty director or mentor.

0101	Susannah Washburn, Kelly Brower	Seats (Total: 10)
Contact instructor or department for details.		

CPSP349T Advanced Practicum: Service Learning; STS Infrastructure and Society S-L Project

Credits: 3 Grading Method: Regular General Education: DSSP

Advanced supervised Service-Learning project.

0101	David Tomblin	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	CCC 1105

CPSP359B Advanced Practicum: Research; Using Company Culture to Gain a Competitive Advantage

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSSP

Advanced supervised internship experience.

Contact department for information to register for this course.

CPSP359N Advanced Practicum: Research

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSSP

Advanced supervised internship experience.

0101	Instructor: TBA	Seats (Total: 5)
Contact instructor or department for details.		

CPSP369A Advanced Practicum: Peer Teaching; Arts

Credits: 1-3 Grading Method: Regular
Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369D Advanced Practicum: Peer Teaching; Science, Discovery, and the Universe

Credits: 1-3 Grading Method: Regular
Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369E Advanced Practicum: Peer Teaching

Credits: 2 Grading Method: Regular
Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369G Advanced Practicum: Peer Teaching

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit
Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369L Advanced Practicum: Peer Teaching; Life Sciences

Credits: 1-3 Grading Method: Regular
Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369N Advanced Practicum: Peer Teaching; International Studies

Credits: 1-3 Grading Method: Regular
Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369P Advanced Practicum: Peer Teaching; Public Leadership

Credits: 1-3 Grading Method: Regular
Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP369T Advanced Practicum: Peer Teaching; Science, Technology, and Society

(Perm req)

Credits: 1-3 Grading Method: Regular

Supervised advanced practicum in peer instruction.

Contact department for information to register for this course.

CPSP388B Advanced Special Topics in College Park Scholars; Business, Soc, Economics: Innovation

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Interdisciplinary topics of special interest to College Park Scholars, such as legacies of the cold war, environmental ethics, women in leadership, and other timely issues. Projects build on previous work in College Park Scholars.

Contact department for information to register for this course.

CPSP388E Advanced Special Topics in College Park Scholars; Advanced Special Topics in College Park Scholars

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Interdisciplinary topics of special interest to College Park Scholars, such as legacies of the cold war, environmental ethics, women in leadership, and other timely issues. Projects build on previous work in College Park Scholars.

Independent study to allow continuation of Connection Project from CPET101.

Contact department for information to register for this course.

CPSS College Park Scholars-Science, Technology and Society Fall 2019

CPSS100 College Park Scholars: Science, Technology & Society First-Year Colloquium I

Credits: 2 Grading Method: Regular

Restriction: Students must be enrolled in the College Park Scholars Science, Technology & Society (CPSS) program.

Introductory colloquium: Examination of issues related to science, technology and society.

0101	Nicole Mogul, David Tomblin	Seats (Total: 16)	
	M 3:15pm - 4:50pm	CCC 1205	
	M 4:00pm - 4:50pm	CCC 1105	Discussion

0102	Nicole Mogul, David Tomblin	Seats (Total: 16)	
	M 3:15pm - 4:50pm	CCC 1205	
	M 4:00pm - 4:50pm	CCC 1111	Discussion
0103	Nicole Mogul, David Tomblin	Seats (Total: 16)	
	M 3:15pm - 4:50pm	CCC 1205	
	M 4:00pm - 4:50pm	CCC 1115	Discussion
0104	Nicole Mogul, David Tomblin	Seats (Total: 16)	
	M 3:15pm - 4:50pm	CCC 1205	
	M 4:00pm - 4:50pm	CCC 1200	Discussion
0105	David Tomblin, Nicole Mogul	Seats (Total: 16)	
	M 3:15pm - 4:50pm	CCC 1205	
	M 4:00pm - 4:50pm	Location: TBA	Discussion
0106	Nicole Mogul, David Tomblin	Seats (Total: 15)	
	M 3:15pm - 4:50pm	CCC 1205	
	M 4:00pm - 4:50pm	CBD 1140	Discussion

CPSS220

The Culturally Competent Expert

Credits: 3

Grading Method: Regular

General Education: DVCC

Restriction: Must be in the College Park Scholars Science, Technology or Society program or have permission of the program.

How can scientists communicate their work effectively? The field of science communication ventures that the answer is not simply a matter of improving capacity (e.g., because people lack scientific information, scientists lack communication skills, or both). Rather, it calls for sustained collaboration and empathy between laypersons and experts. In this hands-on, experiential course, we use a model of cultural competency to put forth solutions to bridge the expert-lay divide. We investigate typical venues in which science is communicated (museums, YouTube videos, federal agency websites, and much much more) and study best practices for communication. Then we explore emerging venues that support sustained contact between so-called "lay citizens" and scientific or technical experts (dance/improv techniques, ethnographic methods and citizen science). Students learn to use cross-cultural perspectives as a basis to pilot and test ways of strengthening relationships and improving communication.

0101	Nicole Mogul	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm	ATL 1114	

CPSS225

College Park Scholars Capstone: Science, Technology, and Society

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	General Education: DSHS, SCIS
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Prerequisite: CPSS100. Restriction: Must be in the College Park Scholars Science, Technology & Society (CPSS) program. Formerly: CPSP227.

Exploration and understanding of ways science and technology shape and are shaped by society.

0201	Logan Williams	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	CCC 1105

CPSS240 College Park Scholars: Science, Technology & Society - Service-Learning Practicum

Credits: 3 Grading Method: Regular General Education: DSSP, SCIS

Restriction: Matriculation into the College Park Scholars Science, Technology & Society (CPSS) program; or permission of instructor.

Supervised Service-Learning practicum in issues related to science, technology and society.

Most of the class times will be spent at area Prince George's schools with partnering robotics teams. Consult the class requirements and locations provided in the syllabus at the beginning of the class. This course requires a \$61 background check fee for working in Prince Georges County K-12 schools.

0101	Timothy Reedy	Seats (Total: 10)
	TuTh 2:00pm - 3:15pm	CBD 1140
0201	Timothy Reedy	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	CBD 1140

DANC **Dance** **Fall 2019**

DANC109 **Choreography I: Improvisation**

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An introduction to the process of spontaneous movement discovery involving solo and group movement experiences.

Prerequisite: by permission of department. Students must pay a \$25.00 lab fee.

5501	Kendra Portier	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm	PAC 1912	Lab

DANC118**Beginning Tap**

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Introduction to tap for the beginning student.

Students must pay a \$25.00 lab fee

5501	Rebecca Hill	Seats (Total: 20)	
	MW 3:30pm - 4:45pm	PAC 1912	Lab

DANC128**Fundamentals of Ballet**

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Introduction to ballet technique and terminology for the beginning student.

Students must pay a \$25 lab fee

5501	Amber Daniels	Seats (Total: 20)	
	TuTh 9:30am - 10:45am	PAC 1908	

DANC138B**Global Dance Forms; House Based Dance**

Credits: 2 Grading Method: Regular, , D
Pass-Fail, Audit

Movement course. Traditional dances and music of selected cultures.

Students must pay a \$25 lab fee. Contemporary House is a fusion of Urban House dance and principles of modern dance. The class also draws on elements unique to social club spaces and improvisation.

5501	Ronya Anderson	Seats (Total: 20)	
	MW 2:00pm - 3:15pm	PAC 1908	

DANC138D**Global Dance Forms; Pilates and Conditioning**

Credits: 2 Grading Method: Regular, , D
Pass-Fail, Audit

Movement course. Traditional dances and music of selected cultures.

5501	Renee Gerardo	Seats (Total: 20)
	TuTh 8:00am - 9:15am	PAC 1611
<i>Students must pay a \$25 lab fee.</i>		

DANC138P Global Dance Forms; Hip Hop

Credits: 2 Grading Method: Regular, , D
 Pass-Fail, Audit

Movement course. Traditional dances and music of selected cultures.

Students must pay a \$25.00 lab fee

5501	Ama Law	Seats (Total: 25)	
	Tu 3:30pm - 6:00pm	PAC 1912	Lab

DANC148 Fundamentals of Modern Dance

Credits: 2 Grading Method: Regular,
 Pass-Fail, Audit

Introduction to modern dance with emphasis on the development of fundamental movement skills.

Students must pay a \$25.00 lab fee.

5502	Adriane Fang	Seats (Total: 30)	
	MW 11:00am - 12:15pm	PAC 1908	Lab
5503	Gabriel Mata-Ortega	Seats (Total: 30)	
	TuTh 2:00pm - 3:15pm	PAC 1912	Lab
5504	Renee Gerardo	Seats (Total: 30)	
	TuTh 12:30pm - 1:45pm	PAC 1912	Lab

DANC149 Fundamentals of Modern Dance II

Credits: 2 Grading Method: Regular

Continuation of the development of axial and locomotor movement skills with emphasis on the development of functional alignment, musicality, range of movement, coordination, and movement memory.

Students must pay a \$25.00 lab fee

5501	Kristina Harris	Seats (Total: 20)	
	MW 3:30pm - 4:45pm	PAC 1908	Lab

DANC158 Fundamentals of Jazz

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Introduction to the jazz style in dance for the beginning student.

Students must pay a \$25 lab fee.

5501	Ronya Anderson	Seats (Total: 20)	
	MW 12:30pm - 1:45pm	PAC 1908	

DANC179 Movement Integration

(Perm req)

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Conditioning and re-patterning techniques for achieving integrated movement.

Students must pay a \$25.00 lab fee.

5501	Adriane Fang	Seats (Total: 20)	
	TuTh 2:00pm - 3:15pm	PAC 1611	Lab

DANC199 Practicum in Choreography, Production and Performance I

(Perm req)

Credits: 1-2 Grading Method: Regular,
Pass-Fail, Audit

Choreography, production, and performance of student works, both on and off campus.

Contact department for information to register for this course.

DANC200 Introduction to Dance

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: HA, D General Education: DSSP

A study of dance as a form of communication and as an art form; a survey of the theories and styles of dance, and their relationships to other art forms.

0101	Gianina Lockley	Seats (Total: 25)	
	TuTh 2:00pm - 3:15pm	BPS 1228	

0201	Xinran Qi	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	SYM 0215
0301	Heidi McFall	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	SYM 0215
FC01	Susan Miller	Seats (Total: 22)
	TuTh 3:00pm - 4:15pm	PAC 3732
<i>Restricted to students in Freshmen Connection.</i>		

DANC200S

Introduction to Dance

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HA, D General Education: DSSP

A study of dance as a form of communication and as an art form; a survey of the theories and styles of dance, and their relationships to other art forms.

Restricted to College Park Scholars - Arts.

0201	Xinran Qi	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	SYM 0215

DANC218

Modern Dance I

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Development of heightened body awareness, breath support, dynamic alignment, and spatial awareness. Focus on rhythmic clarity and musicality.

Prerequisite: permission of department. Students must pay a \$25.00 lab fee.

5501	Kendra Portier	Seats (Total: 17)
	MWF 9:00am - 10:30am	PAC 1912 Lab

DANC219

Modern Dance II

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Continuation of the elements addressed in DANC218 with an added focus on momentum, the use of counter-tension, stability/mobility, suspension, and dynamic range.

Prerequisite: DANC218 and permission of department. Students must pay a \$25.00 lab fee.

5501	Kendra Portier	Seats (Total: 8)	
	MWF 9:00am - 10:30am	PAC 1912	Lab

DANC228

Ballet I

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Barre and center work for alignment, strength, flexibility and coordination. Introduction to ballet terminology.

Prerequisite: permission of department. Students must pay a \$25.00 lab fee.

5501	Kendra Portier	Seats (Total: 10)	
	TuTh 2:00pm - 3:15pm	PAC 1908	Lab

DANC229

Ballet II

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Continuation of DANC228.

Prerequisite: permission of department. Students must pay a \$25.00 lab fee.

5501	Kendra Portier	Seats (Total: 10)	
	TuTh 2:00pm - 3:15pm	PAC 1908	Lab

DANC299

Practicum in Choreography, Production and Performance II

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Continuation of DANC199.

Contact department for information to register for this course.

DANC309

Choreography III: Dance Composition

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Exploration of the structural elements of dance composition.

5501	Alvin Mayes	Seats (Total: 15)	
	MWF 12:30pm - 1:50pm	PAC 1912	

DANC318**Modern Dance III**

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Continuation of the elements addressed in DANC219 with an added focus on off-verticality, spirals, complex level changes, more complex and extended phrasing, responsiveness to accompaniment, vocalization.

Prerequisite: DANC219 and permission of department. Students must pay a \$25.00 lab fee.

5501	Alvin Mayes	Seats (Total: 11)	
	MWF 11:00am - 12:30pm	PAC 1912	Lab

DANC319**Modern Dance IV**

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Continuation of the elements addressed in DANC318 with an added focus on movement subtlety and complexity, and stylistic demands.

Prerequisite: DANC318 and permission of department. Students must pay a \$25.00 lab fee.

5501	Alvin Mayes	Seats (Total: 14)	
	MWF 11:00am - 12:30pm	PAC 1912	Lab

DANC328**Ballet III**

Credits: 2

Grading Method: Regular,
Pass-Fail, Audit

Execution of the vocabulary of ballet movement with technical accuracy.

5501	Gabriel Mata-Ortega	Seats (Total: 10)	
	TuTh 12:30pm - 1:45pm	PAC 1908	

DANC329**Ballet IV**

Credits: 2

Grading Method: Regular,
Pass-Fail, Audit

Continuation of DANC328.

5501	Gabriel Mata-Ortega	Seats (Total: 10)	
	TuTh 12:30pm - 1:45pm	PAC 1908	

DANC371**Somatics**

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit*Prerequisite: DANC179. Restriction: Permission of ARHU-Dance department.**Current ideas and trends in dance technique, with a focus on the incorporation of dance science and somatics into dance training.*

Students must pay a \$25 lab fee.

5501	Crystal Davis	Seats (Total: 12)
	TuTh 11:00am - 12:15pm	PAC 1611

DANC386**Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular,
Pass-Fail*Restriction: Junior standing or higher; and permission of ARHU-School of Theatre, Dance & Performance Studies department.***Contact department for information to register for this course.**

DANC398**Directed Studies in Dance**

(Perm req)

Credits: 1-6

Grading Method: Regular

0101	Patrik Widrig	Seats (Total: 3)
	Contact instructor or department for details.	
0201	Sara Pearson	Seats (Total: 3)
	Contact instructor or department for details.	
0301	Maura Keefe	Seats (Total: 3)
	Contact instructor or department for details.	
0401	Alvin Mayes	Seats (Total: 5)
	Contact instructor or department for details.	
0501	Paul Jackson	Seats (Total: 3)
	Contact instructor or department for details.	
0601	Instructor: TBA	Seats (Total: 3)
	Contact instructor or department for details.	

0701	Crystal Davis	Seats (Total: 3)
	Contact instructor or department for details.	
0801	Instructor: TBA	Seats (Total: 3)
	Contact instructor or department for details.	
0901	Instructor: TBA	Seats (Total: 3)
	Contact instructor or department for details.	
1001	Adriane Fang	Seats (Total: 3)
	Contact instructor or department for details.	

DANC399

(Perm req)

Practicum in Choreography, Production and Performance III

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Continuation of DANC299.

Prerequisite: DANC 299.

0101	Adriane Fang	Seats (Total: 5)
	Contact instructor or department for details.	
0201	Sara Pearson	Seats (Total: 5)
	Contact instructor or department for details.	
0301	Maura Keefe	Seats (Total: 5)
	Contact instructor or department for details.	
0401	Alvin Mayes	Seats (Total: 5)
	Contact instructor or department for details.	
0501	Paul Jackson	Seats (Total: 15)
	Contact instructor or department for details.	
0601	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	
0701	Crystal Davis	Seats (Total: 5)
	Contact instructor or department for details.	
0801	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	

0901	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
1001	Adriane Fang Contact instructor or department for details.	Seats (Total: 15)

DANC410

Technical Theater Production for Dance

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: DANC210; or students who have taken courses with comparable content may contact the department; or permission of ARHU-School of Theatre, Dance & Performance Studies department.

A study of the theoretical principles of production and the practical application of those principles to the presentation of dance works.

Students must pay a \$25 lab fee.

5501	Paul Jackson TuTh 9:30am - 10:45am	Seats (Total: 8) PAC 1610
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DANC448

Modern Dance V

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Complex phrases of modern dance movement with emphasis on articulation and expression.

Prerequisite: DANC349 and aududition. Students must pay a \$25.00 lab fee.

5501	Adriane Fang MWF 9:00am - 10:30am	Seats (Total: 10) PAC 1908	Lab
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DANC449

Modern Dance VI

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Continuation of DANC448.

Prerequisite: DANC 448 and permission from the department Students must pay a \$25.00 lab fee.

5501	Adriane Fang MWF 9:00am - 10:30am	Seats (Total: 5) PAC 1908	Lab
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DANC488**Project-Based Learning**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A specific project, is addressed, in dance from the perspectives of the investigator, the creator/choreographer, and the performer. Projects are cross-disciplinary and/or cross-cultural, and may involve both on- and off-campus experiences.

Students must pay a \$25.00 lab fee.

5501	Alvin Mayes	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	PAC 1610

DANC489M**Special Topics in Dance; Contemporary Modern**

(Perm req)

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Theoretical, choreographic, pedagogic, or performance study.

Must have completed DANC218 and DANC219. Students must pay a \$25 lab fee.

5501	Tristan Koepke	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	PAC 1610

DANC499**Practicum in Choreography, Production and Performance IV**

(Perm req)

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Advanced workshop in dance presentation, including performing, production and planned field experiences.

Prerequisite: DANC 399.

0101	Patrik Widrig	Seats (Total: 5)
	Contact instructor or department for details.	
0201	Sara Pearson	Seats (Total: 5)
	Contact instructor or department for details.	
0301	Maura Keefe	Seats (Total: 5)
	Contact instructor or department for details.	
0401	Alvin Mayes	Seats (Total: 5)
	Contact instructor or department for details.	

0501	Paul Jackson	Seats (Total: 15)
	Contact instructor or department for details.	
0601	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	
0701	Crystal Davis	Seats (Total: 5)
	Contact instructor or department for details.	
0801	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	
0901	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	
1001	Adriane Fang	Seats (Total: 15)
	Contact instructor or department for details.	

DANC600

Graduate Dance Research

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

Supervised writing of reports and articles on selected dance subjects. Study of library resources and interviewing techniques. Preparation for written documentation of thesis project.

0101	Maura Keefe	Seats (Total: 5)
	Tu 2:00pm - 4:45pm	PAC 1924

DANC608

Graduate Choreography I

Credits: 3

Grading Method: Regular,
Audit

Developing and defining individual choreographic voice and vision in a shared studio setting.

Prerequisite: Admission to MFA in Dance or permission of department. Students must pay a \$25.00 lab fee. Developing and defining individual choreographic voice and vision in a shared studio setting.

5501	Kendra Portier	Seats (Total: 5)
	MW 11:00am - 12:50pm	PAC 1610 Lab

DANC610

Workshop in the Direction of Dance Production

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: DANC410; or students who have taken courses with comparable content may contact the department.

A lecture/laboratory course dealing with the relationship of the director to all of the activities involved in the presentation of a dance concert.

5501	Paul Jackson	Seats (Total: 5)
	MW 1:30pm - 2:45pm	PAC 1924

DANC647

Dance and Movement Practice

(Perm req)

Credits: 2

Grading Method: Regular

Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

Experiential studio work that generates common movement vocabulary and innovations of same in a shared, faculty-led exploration of movement for the purpose of generating vocabulary for technique, choreography, and pedagogy.

Students must pay a \$25.00 lab fee.

5501	Patrik Widrig	Seats (Total: 5)
	Contact instructor or department for details.	
5502	Sara Pearson	Seats (Total: 5)
	Contact instructor or department for details.	
5504	Alvin Mayes	Seats (Total: 5)
	Contact instructor or department for details.	
5507	Crystal Davis	Seats (Total: 5)
	Contact instructor or department for details.	
5508	Adriane Fang	Seats (Total: 5)
	Contact instructor or department for details.	
5510	Maura Keefe	Seats (Total: 5)
	Contact instructor or department for details.	

DANC678

Individual Movement Practice

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

Special Topics in dance theory, research or creative projects.

Contact department for information to register for this course.

DANC689M Special Topics in Dance; Advanced Modern Technique I

(Perm req)

Credits: 1 Grading Method: Regular,
Audit

Special Topics in dance theory, research or creative projects.

Students must pay a \$25 lab fee.

5501	Adriane Fang	Seats (Total: 5)	
	MWF 9:00am - 10:30am	PAC 1908	Lab

DANC689P Special Topics in Dance; Graduate Dance Pedagogy

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Special Topics in dance theory, research or creative projects.

Students must pay a \$25 lab fee. Must be enrolled in the MFA Dance degree.

5501	Crystal Davis	Seats (Total: 5)	
	Th 2:00pm - 4:45pm	PAC 3732	

DANC689T Special Topics in Dance; Advanced Modern Technique II

(Perm req)

Credits: 1 Grading Method: Regular,
Audit

Special Topics in dance theory, research or creative projects.

Students must pay a \$25 lab fee.

5501	Adriane Fang	Seats (Total: 5)	
	MWF 9:00am - 10:30am	PAC 1908	Lab

DANC689W Special Topics in Dance; MFA Thesis Writing Lab

(Perm req)

Credits: 1 Grading Method: Regular,
Audit

Special Topics in dance theory, research or creative projects.

Contact Instructor for meeting times.

0101	Maura Keefe	Seats (Total: 4)
	Contact instructor or department for details.	

DANC698

Independent Study in Dance

Credits: 1-3 Grading Method: Regular,
Audit

Directed independent study in theoretical topics.

0101	Patrik Widrig	Seats (Total: 3)
	Contact instructor or department for details.	
0201	Sara Pearson	Seats (Total: 3)
	Contact instructor or department for details.	
0301	Maura Keefe	Seats (Total: 3)
	Contact instructor or department for details.	
0401	Alvin Mayes	Seats (Total: 5)
	Contact instructor or department for details.	
0501	Paul Jackson	Seats (Total: 3)
	Contact instructor or department for details.	
0601	Kendra Portier	Seats (Total: 3)
	Contact instructor or department for details.	
0701	Crystal Davis	Seats (Total: 3)
	Contact instructor or department for details.	
0801	Instructor: TBA	Seats (Total: 3)
	Contact instructor or department for details.	
1001	Adriane Fang	Seats (Total: 3)
	Contact instructor or department for details.	

DANC719

Graduate Choreography Projects

Credits: 3 Grading Method: Regular,
Audit

Research-based choreographic projects in preparation for the choreographed thesis project.

Prerequisite: Admission to MFA in Dance or permission of department. Students must pay a \$25.00 lab fee. Research-based choreographic projects in preparation for the choreographed thesis project.

5501	Maura Keefe	Seats (Total: 5)
	MW 11:00am - 12:50pm	PAC 1611

DANC777

Internship in Dance

(Perm req)

Credits: 6

Grading Method: Sat-Fail

Restriction: Must be admitted to MFA in Dance; or permission of ARHU-School of Theatre, Dance & Performance Studies department.

Internship in dance advocacy, administration, education, community building, choreography, or performance with an agency off campus and with a national or international profile.

0101	Crystal Davis	Seats (Total: 5)
	Contact instructor or department for details.	

DANC788

Master's Tutorial for Choreography; Graduate Tutorial

Credits: 1-3

Grading Method: Regular,
Audit

Supervised production and presentation of a significant choreographic project.

0101	Patrik Widrig	Seats (Total: 3)
	Contact instructor or department for details.	
0201	Sara Pearson	Seats (Total: 3)
	Contact instructor or department for details.	
0301	Maura Keefe	Seats (Total: 3)
	Contact instructor or department for details.	
0401	Alvin Mayes	Seats (Total: 3)
	Contact instructor or department for details.	
0501	Paul Jackson	Seats (Total: 3)
	Contact instructor or department for details.	
0601	Instructor: TBA	Seats (Total: 3)
	Contact instructor or department for details.	
0701	Crystal Davis	Seats (Total: 3)
	Contact instructor or department for details.	

0801	Instructor: TBA Contact instructor or department for details.	Seats (Total: 3)
1001	Adriane Fang Contact instructor or department for details.	Seats (Total: 3)

DANC799

Master's Thesis Project

Credits: 1-6 Grading Method: Regular, Sat-Fail
Contact department for information to register for this course.

EALL

East Asian Languages and Literatures

Fall 2019

EALL300

The Languages of East Asia

Credits: 3 Grading Method: Regular, Pass-Fail, Audit, D General Education: DVUP

A survey of Chinese, Japanese, and Korean, and the languages of other East Asian nationalities. Provides a basic understanding of the structures of these languages. Topics covered include the characterizing features; the relationships of the languages to each other; the geographical, social, and historical settings. No knowledge of Asian languages is required. Taught in English.

0101	Samuel Ramsey MW 3:30pm - 4:45pm	Seats (Total: 30) JMZ 2206
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ECON

Economics

Fall 2019

ECON111

Thinking Like an Economist

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

Restriction: Sophomore standing or lower; or permission of BSOS-Economics department.

An introduction to the modes of thought of economics. Use of simple standard tools of economics to analyze important problems that arise frequently in public policy, the news media, and in daily life. An emphasis on how economists predict what choices societies make and how economists analyze whether those are good choices. Practical application of a variety of economic tools leading to a focus on the essential unity underlying these analytical tools, viewing economics as a discipline that applies a core methodology in different ways in different situations.

0101	Peter Murrell	Seats (Total: 20)		
	TuTh 2:00pm - 2:50pm	TYD 0117		
	F 9:00am - 9:50am	LEF 1222		Discussion
0102	Peter Murrell	Seats (Total: 20)		
	TuTh 2:00pm - 2:50pm	TYD 0117		
	F 10:00am - 10:50am	LEF 1222		Discussion
0103	Peter Murrell	Seats (Total: 20)		
	TuTh 2:00pm - 2:50pm	TYD 0117		
	F 11:00am - 11:50am	LEF 1222		Discussion

ECON175

Inequality: Determinants and Policy Remedies

Credits: 3

Grading Method: Regular

General Education: DSHS,
SCIS

Through most of the 20th century gaps in income between rich and poor declined in the US, but after 1970 we experienced a very rapid increase in inequality. This course challenges students to investigate why people make different amounts of money, why income inequality has risen so dramatically in recent years, what public policy tools exist to counter inequality increases, and what different institutional arrangements different countries use to lower inequality. This course will introduce students to theoretical tools used by economists to understand the sources of inequality and will also examine empirical evidence to better understand changes in the wage distribution and, more generally, in income distribution.

0101	Ethan Kaplan	Seats (Total: 20)		
	MW 9:00am - 9:50am	TYD 1101		
	F 9:00am - 9:50am	SQH 2120		Discussion
0102	Ethan Kaplan	Seats (Total: 20)		
	MW 9:00am - 9:50am	TYD 1101		
	F 10:00am - 10:50am	SQH 2120		Discussion
0103	Ethan Kaplan	Seats (Total: 20)		
	MW 9:00am - 9:50am	TYD 1101		
	F 11:00am - 11:50am	SQH 2120		Discussion

ECON181

Putting a Price on the Environment: An Economist's Perspective on Sustainability

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHS,
SCIS

How does society balance the benefits of environmental protection and preservation against the costs? Though some might say that the environment is priceless, economists recognize that every action involves trade-offs. This course investigates sustainability through comparing costs and benefits. From this perspective, other questions arise: How can we design policies that incentivize sustainable choices? Why might usual market functioning fail to achieve sustainability? Do we need to put a price on the environment in order to protect it? How do we measure an economy's "success"? This course explores the answers to these and other related questions from an economist's perspective.

0101	Erin Moody	Seats (Total: 20)		
	MW 12:00pm - 12:50pm	ESJ 2208		
	F 9:00am - 9:50am	TYD 2102		Discussion
0102	Erin Moody	Seats (Total: 20)		
	MW 12:00pm - 12:50pm	ESJ 2208		
	F 10:00am - 10:50am	LEF 1221		Discussion
0103	Erin Moody	Seats (Total: 20)		
	MW 12:00pm - 12:50pm	ESJ 2208		
	F 11:00am - 11:50am	TYD 2102		Discussion
0104	Erin Moody	Seats (Total: 20)		
	MW 12:00pm - 12:50pm	ESJ 2208		
	F 12:00pm - 12:50pm	LEF 1221		Discussion
0105	Erin Moody	Seats (Total: 20)		
	MW 12:00pm - 12:50pm	ESJ 2208		
	F 1:00pm - 1:50pm	LEF 1221		Discussion
0106	Erin Moody	Seats (Total: 20)		
	MW 12:00pm - 12:50pm	ESJ 2208		
	F 2:00pm - 2:50pm	TYD 2102		Discussion

ECON200

Principles of Microeconomics

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS

Prerequisite: MATH107 or MATH110; or must have math eligibility of MATH113 or higher. Credit only granted for: ECON200, AREC240, or AREC250. Additional information: It is recommended that students complete ECON200 before taking ECON201.

Introduces economic models used to analyze economic behavior by individuals and firms and consequent market outcomes. Applies conceptual analysis to several policy issues and surveys a variety of specific topics within the broad scope of microeconomics.

0101	Erin Moody	Seats (Total: 350)
	TuTh 9:30am - 10:45am	TYD 0130
0201	Erin Moody	Seats (Total: 350)
	TuTh 11:00am - 12:15pm	TYD 0130
0301	Hossein Abbasi	Seats (Total: 350)
	TuTh 12:30pm - 1:45pm	TYD 0130
FC01	Hossein Abbasi	Seats (Total: 222)
	MW 7:30pm - 8:45pm	TYD 0130
	<i>Restricted to students in Freshmen Connection.</i>	

ECON201 Principles of Macroeconomics

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS

Prerequisite: MATH107 or MATH110; or must have math eligibility of MATH113 or higher.

Recommended: ECON200. Credit only granted for: ECON201 or ECON205.

An introduction to how market economies behave at the aggregate level. The determination of national income/output and the problems of unemployment inflation, will be examined, along with monetary and fiscal policy.

0101	John Neri	Seats (Total: 300)
	MW 2:00pm - 3:15pm	TYD 0130
0201	John Shea	Seats (Total: 250)
	TuTh 2:00pm - 3:15pm	SKN 0200

ECON230 Applied Economic Statistics

Credits: 3 Grading Method: Regular

Prerequisite: Must have math eligibility of MATH113 or higher; or 1 course with a minimum grade of C- from (MATH107, MATH110). And minimum grade of C- in ECON200 and ECON201. Recommended: Students should already have basic familiarity with Microsoft Excel or similar spreadsheet software.

Restriction: Must be in Economics Bachelor of Arts program. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introductory course to develop understanding of statistical concepts used in applied economics. Students will acquire skills needed to calculate and interpret statistical concepts, including descriptive statistics, probability, discrete and continuous distributions, sampling, point and interval estimations, hypothesis testing, basic analysis of variance, and simple linear regression models. Students will apply these concepts to data using both handheld calculators and spreadsheets(Excel), and students will be introduced to an econometric software package such as SPSS or SAS or R.

0101	Nathalie Gonzalez	Seats (Total: 40)
	MWF 10:00am - 10:50am	TYD 1102

ECON305 Intermediate Macroeconomic Theory and Policy

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: Minimum grade of C- in ECON201 and ECON200. And 1 course with a minimum grade of C- from (MATH120, MATH130, MATH136, MATH140); or must have completed MATH220 with a minimum grade of C-. Credit only granted for: ECON305 or ECON325.

Analysis of the determination of national income, employment, and price levels. Discussion of consumption, investment, inflation, and government fiscal and monetary policy.

0101	John Neri	Seats (Total: 180)
	MWF 12:00pm - 12:50pm	HJP 0226
0201	Martina Copelman	Seats (Total: 90)
	TuTh 9:30am - 10:45am	TWS 0320
0301	Martina Copelman	Seats (Total: 90)
	TuTh 11:00am - 12:15pm	TWS 0320

ECON306 Intermediate Microeconomic Theory & Policy

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: 1 course with a minimum grade of C- from (ECON200, AREC250); and minimum grade of C- in ECON201. And 1 course with a minimum grade of C- from (MATH120, MATH130, MATH136, MATH140); or must have completed MATH220 with a minimum grade of C-. Credit only granted for: ECON306, ECON326, AREC489M, or AREC326.

Analysis of the theories of consumer behavior, producer behavior, different market structures, and various sources of inefficient outcomes. Analysis of microeconomic policies designed to improve market outcomes.

0101	Aaron Finkle	Seats (Total: 160)
	MWF 11:00am - 11:50am	SHM 2102
0201	Aaron Finkle	Seats (Total: 160)
	MWF 12:00pm - 12:50pm	SHM 2102
SG91	Satyendra Verma	Seats (Total: 50)
	MW 12:30pm - 1:45pm	BLD3 3202
<i>Restricted to BMGT-Shady Grove Seniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>		

ECON311 American Economic History Before the Civil War

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200 and ECON201. Restriction: Must be in Economics Bachelor of Arts program.

Economic concepts are used to analyze various aspects of the founding and early history of the U.S., including the British settlement of the North American colonies, the economics of the American Revolutionary war, the writing of the Constitution, the development of financial markets, policies on public lands and the spread of western agriculture, slavery, banking, and early industrialization.

0101	John Wallis	Seats (Total: 180)
	TuTh 9:30am - 10:45am	SHM 2102

ECON314 Economic History, Development and Policy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ECON200 and ECON201.

Study abroad in the economic history, institutional development, and recent economic policy problems of selected areas.

Contact department for information to register for this course.

ECON315 Economic Development of Underdeveloped Areas

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200 and ECON201. Credit only granted for: ECON315 or ECON416.

Analysis of the economic and social characteristics of underdeveloped areas. Recent theories of economic development, obstacles to development, policies and planning for development.

Contact department for information to register for this course.

ECON317

Global Economic Policies

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200 and ECON201. Restriction: Must be in Economics Bachelor of Arts program.

Analysis of policy options and debates on fostering economic growth and development in a global economy where national boundaries are no longer relevant. Topics covered will include real loanable funds markets in both local and international contexts during normal conditions and during financial crises, the design of trade and industrial policies, and the role of the World Bank, IMF, WTO, and other international agencies as well as regional and bilateral trade agreements. Emerging economies will be emphasized.

0101	Naveen Sarna TuTh 2:00pm - 3:15pm	Seats (Total: 40) TYD 0111
0201	Naveen Sarna TuTh 3:30pm - 4:45pm	Seats (Total: 40) TYD 0111
0301	Naveen Sarna TuTh 5:00pm - 6:15pm	Seats (Total: 40) TYD 0111
0401	Martina Copelman TuTh 2:00pm - 3:15pm	Seats (Total: 40) TYD 1114

ECON321

Economic Statistics

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON201 and ECON200; and minimum grade of C- in MATH141. Recommended: STAT100. Restriction: Must be in Economics Bachelor of Science program. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introduction to the use of statistics in economics. Topics include: Probability, random variables and their distributions, sampling theory, estimation, hypothesis testing, analysis of variance, regression analysis and correlation.

0101	Alka Gandhi	Seats (Total: 40)
	MWF 1:00pm - 1:50pm	TYD 2111

ECON325 Intermediate Macroeconomic Analysis

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200, ECON201, and MATH141. Restriction: Must be in Economics Bachelor of Science program. Credit only granted for: ECON305 or ECON325.

Analysis of macroeconomic behavior and policy with emphasis on theoretical rigor. Topics include the determinants of economic growth, unemployment, inflation, and international economic flows.

0101	Alka Gandhi	Seats (Total: 30)
	MW 10:00am - 10:50am	TWS 1100
	F 9:00am - 9:50am	TYD 2111 Discussion
0102	Alka Gandhi	Seats (Total: 30)
	MW 10:00am - 10:50am	TWS 1100
	F 11:00am - 11:50am	TYD 2111 Discussion
0103	Alka Gandhi	Seats (Total: 30)
	MW 10:00am - 10:50am	TWS 1100
	F 2:00pm - 2:50pm	TYD 2111 Discussion

ECON326 Intermediate Microeconomic Analysis

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200, ECON201, and MATH141. Restriction: Must be in Economics Bachelor of Science program. Credit only granted for: ECON306, ECON326, AREC326, or AREC489M.

Analysis of economic decision-making by individual buyers and sellers, and resulting market outcomes, with emphasis on theoretical rigor. The efficient properties of perfect competition are examined, followed by consideration of market power, externalities, and asymmetric information.

0101	Melissa Kearney	Seats (Total: 30)	
	MW 2:00pm - 2:50pm	TWS 0310	
	F 10:00am - 10:50am	TYD 1118	Discussion
0102	Melissa Kearney	Seats (Total: 30)	
	MW 2:00pm - 2:50pm	TWS 0310	
	F 11:00am - 11:50am	TYD 1118	Discussion
0103	Melissa Kearney	Seats (Total: 30)	
	MW 2:00pm - 2:50pm	TWS 0310	
	F 2:00pm - 2:50pm	TYD 1118	Discussion

ECON330 Money and Banking

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200 and ECON201.

The structure of financial institutions and their role in the provision of money and near money. Analysis of the Federal Reserve System, the techniques of central banks, and the control of supply of financial assets in stabilization policy. Relationship of money and credit to economic activity and the price level.

0101	John Neri	Seats (Total: 275)
	MW 3:30pm - 4:45pm	SKN 0200

ECON340 International Economics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON200 and ECON201. Credit only granted for: ECON340 or ECON441.

Introduces economic models of international trade and finance. Analyzes policies designed to promote and restrict international trade and to manage exchange rates and impact international capital flows.

SG91	Mateo Uribe-Castro	Seats (Total: 80)
	MW 11:00am - 12:15pm	BLD3 3202
<i>Restricted to BMGT-Shady Grove Seniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>		

ECON358K Special Topics in Study Abroad III; Spreadsheets and Data in Economics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ECON358L Special Topics in Study Abroad III; Economics of Social Issues

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ECON358M Special Topics in Study Abroad III; Financial Markets and Institutions

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ECON358N Special Topics in Study Abroad III; History of Economic Thought

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ECON386 Experiential Learning

(Perm req) Credits: 3 Grading Method: Sat-Fail

Prerequisite: ECON201 and ECON200. Restriction: Permission of BSOS-Economics department; and must be in a major within the BSOS-Economics department; and minimum cumulative GPA of 2.5; and junior standing or higher.

See Department Advising Office for course eligibility, course requirements, and application information.

Contact department for information to register for this course.

ECON387 Career Preparation for Economics Majors

Credits: 2 Grading Method: Regular

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON325); and 1 course with a minimum grade of C- from (ECON306, ECON326). Restriction: Must be in one of the following programs (Economics Bachelor of Arts; Economics Bachelor of Science) ; and must have earned a minimum of 60 credits. Additional information: This course is intended for juniors or first semester seniors who are beginning their job search. Students who have already secured an employment opportunity for after graduation should not register.

Increase student knowledge of career paths, job search tools, and strategies for successfully obtaining a job with a BA or BS in economics. Students will engage in a range of different activities which build their understanding of job opportunities in economics and hone their abilities to find positions they want. Students will reflect on specific skills employers seek from economics graduates and incorporate that knowledge in their own individual job search and career plan.

0101	Stefania Scandizzo	Seats (Total: 20)
	Meets August 26, 2019 - October 11, 2019	
	F 12:00pm - 1:50pm	TYD 0111
	Class time/details on ELMs	ONLINE Discussion
0201	Stefania Scandizzo	Seats (Total: 20)
	Meets October 14, 2019 - December 9, 2019	
	F 12:00pm - 1:50pm	TYD 0111
	Class time/details on ELMs	ONLINE Discussion

ECON396

Independent Honors Study

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of BSOS-Economics department.

First semester of the departmental honors sequence. Students will develop and apply research skills required to carry out original research. By the end of the semester students will have produced a complete draft of an honors thesis resembling a scholarly journal article.

0101	Nuno Limao	Seats (Total: 15)
	TuTh 9:30am - 10:45am	JMZ 3122

ECON397

Honors Thesis

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ECON396. Restriction: Must be a candidate for honors in economics.

General supervision will be provided through assembled meetings with the professor in charge of the course.

Contact department for information to register for this course.

ECON398D Topics in Economics; Origins and Use of Economic Data

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

This course is designed to meet the changing interests of students and staff. Topics vary in response to those interests. Students are advised to seek information about the coverage and prerequisites during the registration period.

Prerequisite: Minimum grade of C- in ECON200 and ECON201; and 1 course with minimum grade of C- from (STAT100, ECON230, BMGT230, ECON321, STAT400, or other equivalent course).

Restriction: Must be in one of the following programs (Economics Bachelor of Arts; Economics Bachelor of Science). Students will be exposed to the nature of data collection and data usage in the field of Economics. Students will learn the historical development of economics statistics, the limitations and advantages of both scope and survey methodology, and Excel/Stata/R skills which will empower students to produce research products with original data.

0101	Nicholas Montgomery	Seats (Total: 30)
	MW 2:00pm - 3:15pm	TYD 1114

ECON398H Topics in Economics; British Economy and Financial System

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

This course is designed to meet the changing interests of students and staff. Topics vary in response to those interests. Students are advised to seek information about the coverage and prerequisites during the registration period.

Contact department for information to register for this course.

ECON398L Topics in Economics; The British Economy and Financial Systems

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

This course is designed to meet the changing interests of students and staff. Topics vary in response to those interests. Students are advised to seek information about the coverage and prerequisites during the registration period.

Contact department for information to register for this course.

ECON399 Independent Study in Economics

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail

*Integrated readings and independent study under direction and supervision of a faculty member.
Contact department for additional information.*

Permission of instructor must be arranged in advance. Open only to students who have previously earned 6 or more credits in upper division economics courses.

Contact department for information to register for this course.

ECON401

Current Issues in American Economic Policy

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON325); and 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON424, ECON422). Restriction: Must be in Economics Bachelor of Arts program.

Analysis of current economic problems and public policies. Topics could include poverty, income inequality, social insurance, education, environmental sustainability, immigration, and innovation. Other issues may be substituted depending on current events.

0101	Daniel Kolliner	Seats (Total: 27)
	MWF 11:00am - 11:50am	TYD 2110

ECON402

Macroeconomic Models and Forecasting

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON325); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program.

Analysis of the fluctuations in economic activity and the formulation and use of forecasting models of the economy. Illustrations of computer macro models and forecasting problems.

0101	Gonzalo Garcia	Seats (Total: 35)
	TuTh 3:30pm - 4:45pm	TYD 2111

ECON406

Advanced Microeconomics

Credits: 3

Grading Method: Regular

Prerequisite: Minimum grade of C- in ECON326; and 1 course with a minimum grade of C- from (ECON321, STAT400). Restriction: Must be in Economics Bachelor of Science program.

Expands on the assumptions of rational decision-making used in intermediate microeconomics and develops more complicated, more realistic models which address uncertainty, intertemporal choices, strategic interactions, social preferences and considerations of what is fair.

0101	Erkut Ozbay	Seats (Total: 70)
	TuTh 11:00am - 12:15pm	TYD 0117

ECON410 Comparative Economic Institutions

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON325 and ECON326; and 1 course with a minimum grade of C- from (ECON321, STAT400). Restriction: Must be in Economics Bachelor of Science program.

Institutions are the sets of rules that constrain the decisions and interactions of economic agents. The course uses economic analysis to understand both formal institutions (e.g. laws) and informal institutions (e.g. cultural norms). Practical examples are drawn from economics, law, and politics, and reflect the experience of many different countries.

0101	Peter Murrell	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	TYD 1114

ECON412 Economic History and Modern Development

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON325 and ECON326. Restriction: Must be in Economics Bachelor of Science program.

Analysis of major economic, political, and social change in the developed world since 1800. This includes factors contributing to increases in economic performance, changes in the form of government, technological change (including industrialization), and integration and disintegration of the global economy. Emphasis is on institutional changes in how societies organize economic and political activities.

0101	Serguey Braguinsky	Seats (Total: 40)
	MW 2:00pm - 3:15pm	TYD 1132

ECON414 Game Theory

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321, STAT400). Restriction: Must be in one of the following programs (Economics Bachelor of Arts; Economics Bachelor of Science). Credit only granted for: CMSC474, ECON414, GVPT399A or GVPT390.

Studies the competitive and cooperative behavior that results when several parties find that their individual outcomes are jointly determined. Students will learn how to use game theory to analyze situations of potential conflict. Applications are drawn from economics, business, and political science.

0101	Nebahat Erturk	Seats (Total: 40)	
	TuTh 12:30pm - 1:45pm	TYD 2102	
0201	Erika Domotor	Seats (Total: 40)	
	MW 3:30pm - 4:45pm	TYD 2102	
0301	Robert Schwab	Seats (Total: 43)	
	Class time/details on ELMs	ONLINE	
	F 10:00am - 10:50am	SQH 1119	Discussion
0302	Robert Schwab	Seats (Total: 43)	
	Class time/details on ELMs	ONLINE	
	F 11:00am - 11:50am	SQH 1119	Discussion

ECON415 Market Design

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON414. Restriction: Must be in Economics Bachelor of Science program.

Focuses on recent developments in the design of markets to improve economic performance and to open new economic opportunities. It is divided into three main segments -- auction design, the design of matching mechanisms, and antitrust theory and policy.

0101	Daniel Vincent	Seats (Total: 40)	
	TuTh 2:00pm - 3:15pm	TYD 2111	

ECON416 Analysis of Economic Development

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON325, ECON326, and ECON422. Restriction: Must be in Economics Bachelor of Science program. Credit only granted for: ECON315 or ECON416.

Analysis of the determinants and influences on economic development. Emphasis on both theoretical models and econometric methods of explaining why some countries are poor, along with examination of policies to promote development.

Contact department for information to register for this course.

ECON422 Econometrics I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON325, ECON326); and 1 course with a minimum grade of C- from (STAT400, ECON321). Restriction: Must be in Economics Bachelor of Science program. Credit only granted for: ECON422, ECON424, AREC422, or AREC489F.

Emphasizes the interaction between economic problems and the assumptions employed in statistical theory. Formulation, estimation, and testing of economic models, including single variable and multiple variable regression techniques, theory of identification, and issues relating to inference.

0101	Alka Gandhi	Seats (Total: 40)
	MWF 12:00pm - 12:50pm	TYD 1102
0201	Ethan Kaplan	Seats (Total: 40)
	MW 9:30am - 10:45am	TYD 2102

ECON423 Econometrics II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON422. Restriction: Must be in Economics Bachelor of Science program.

Interaction between economic problems and specification and estimation of econometric models. Topics include issues of autocorrelation, heteroscedasticity, functional form, simultaneous equation models, qualitative choice models, and other computational methods.

0101	Jintae Kim	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	TYD 2102
0201	Sergio Urzua	Seats (Total: 40)
	MW 10:30am - 11:45am	TYD 2111

ECON424 Applied Econometrics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON306, ECON325, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program. Credit only granted for: ECON422 or ECON424.

Provide the knowledge and skills necessary to accomplish and utilize basic applied econometric analysis utilized by many business service providers, government agencies, and nonprofits engaged in policy analysis. Topics include simple and multiple regressions using cross section, time series, and panel data, issues of heteroskedasticity, serial correlation, and multicollinearity, models with binary dependent variable, and program evaluation. Course emphasizes application of knowledge using software packages but still covers essential theoretical background.

0101	Hossein Abbasi TuTh 9:30am - 10:45am	Seats (Total: 40) TYD 2111
0201	Hossein Abbasi TuTh 11:00am - 12:15pm	Seats (Total: 40) TYD 2111
0301	Chenyu Mao TuTh 5:00pm - 6:15pm	Seats (Total: 40) TYD 2102

ECON425

Mathematical Economics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON325); and 1 course with a minimum grade of C- from (ECON306, ECON326). Restriction: Must be in Economics Bachelor of Arts program.

Covers mathematical tools and skills utilized in upper undergraduate and master's level coursework in Economics and Public Policy. Reviews calculus and math of finance and growth. Introduces techniques of optimization, linear algebra, and differential equations and connects them to micro and macro theory and applications. Topics will also include coverage of probability theory to explore how economists model uncertainty, as well as economic applications of integration.

Contact department for information to register for this course.

ECON426

Economics of Cost-Benefit Analysis

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON306, ECON325, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program.

Study of how to use cost benefit analysis and other similar tools of applied microeconomics to conduct policy analyses. Cost-benefit analysis is an empirical method of identifying an optimal choice from a set of policy alternatives, where optimal is defined in terms of economic efficiency. Real world examples are addressed, so that students understand limitations of the methods and also interactions of economic analysis with political and administrative processes.

0101	Olga Fetisova-Canas MW 3:30pm - 4:45pm	Seats (Total: 27) TYD 2111
0201	Gentry Johnson MW 5:00pm - 6:15pm	Seats (Total: 27) TYD 2102
0301	Ephraim Leibtag Th 6:30pm - 9:00pm	Seats (Total: 27) TYD 2102

ECON434 The Economics of Information and Uncertainty

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321, STAT400). Restriction: Must be in one of the following programs (Economics Bachelor of Arts; Economics Bachelor of Science). Credit only granted for: ECON498U or ECON434. Formerly: ECON498U.

How do rational agents make decisions when faced with uncertainty? How do markets and other institutions deal with risks? How do markets behave when some actors are better informed than others? What incentives influence whether economic decision-makers hide or reveal information? Topics include the value of information, the purchase of warranties, agency problems in management, adverse selection and moral hazard in insurance, and signaling in education.

0101	Richard Stahnke TuTh 12:30pm - 1:45pm	Seats (Total: 40) TYD 0101
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ECON435 Financial Markets and the Macroeconomy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON325); and 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program; and must not have completed BMGT343. Credit only granted for: BMGT343 or ECON435. Additional information: Finance majors will not receive credit for ECON435.

The different types of financial assets that exist, the markets that they trade in, and the determination of their prices and rates of return are examined. Specific topics that will be covered include the Markowitz portfolio selection model, the capital asset pricing model, the arbitrage pricing theory, the efficient markets hypothesis, the term structure of interest rates, and options. There will be almost no emphasis on issues in corporate finance.

0101	Richard Stahnke	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	TYD 1114
0201	Richard Stahnke	Seats (Total: 40)
	TuTh 5:00pm - 6:15pm	TYD 1114

ECON436

Financial Econometrics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON325 and ECON422. Restriction: Must be in Economics Bachelor of Science program.

An introduction to financial econometrics, which is data science applied to understanding the financial system. Students will learn modern techniques in financial econometrics with an emphasis on the interaction between modeling (theory) and empirical analysis. Topics include relevant economic theory, optimization techniques, probability models, statistical analysis, and use of statistical software.

0101	Jintae Kim	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	TYD 2102

ECON442

Globalization and Capital Markets

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ECON326 and ECON325; and 1 course with a minimum grade of C- from (ECON321, STAT400). Restriction: Must be in Economics Bachelor of Science program; and must not have completed ECON441. Credit only granted for: ECON441 or ECON442.

Uses models of open-economy macroeconomics to explain the causes and consequences of international capital flows. Analysis is made of private consumption, investment, the government sector, current accounts, the labor market, and the money and foreign exchange markets in small open economies. This framework is then used to study examples of how speculative attacks on currencies, sudden reversals of capital inflows, and the effects of the lack of credibility of economic policy affect economic development.

0101	Jintae Kim	Seats (Total: 40)
	TuTh 9:30am - 10:45am	TYD 1114

ECON443 International Trade and Trade Policy in the New Global Economy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON305, ECON325); and 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program; and must not have completed ECON441. Credit only granted for: ECON441 or ECON443.

Examines the economics of international economic integration, including the theory of customs unions and free trade areas, the role of GATT and the WTO, changes in individual countries' foreign trade policies during the new era of globalization, the special role of multinational firms in world trade, and recent controversies about the benefits and costs of globalized trade.

0101	Stefania Scandizzo	Seats (Total: 40)
	MWF 10:00am - 10:50am	TYD 0102
0201	Stefania Scandizzo	Seats (Total: 40)
	MWF 11:00am - 11:50am	TYD 0102

ECON451 Public Choice

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program.

Analysis of collective decision making, economic models of government, program budgeting, and policy implementation; emphasis on models of public choice and institutions which affect decision making.

0101	Peter Coughlin	Seats (Total: 40)
	MWF 12:00pm - 12:50pm	TYD 2102
0201	Peter Coughlin	Seats (Total: 40)
	MWF 1:00pm - 1:50pm	TYD 2102

ECON453 Natural Resources and Public Policy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: AREC326, ECON306, or ECON326; and (BMGT230 or ECON230). Restriction: Must be in one of the following programs (Agricultural and Resource Economics; Agricultural and Resource Economics: Agribusiness; Agricultural and Resource Economics: Environmental and Resource Economics; Economics Bachelor of Arts; Environmental Science & Policy-Env Economics). Cross-listed with AREC453. Credit only granted for: AREC453 or ECON453.

Rational use and reuse of natural resources. Theory, methodology, and policies concerned with the allocation of natural resources among alternative uses. Optimum state of conservation, market failure, safe minimum standard, and cost-benefit analysis.

0101	Erik Lichtenberg	Seats (Total: 80)
	TuTh 2:00pm - 3:15pm	SYM 0200

ECON456 Law and Economics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, BMGT230, ECON321). Restriction: Must be in Economics Bachelor of Arts program.

Relationship of the exchange process to the system of institutions and rules that society develops to carry out economic transactions. Topics covered include: Property rights; torts, negligence, and liability; contracts and exchanges; criminal control and enforcement; equity and efficiency issues .

0101	Aaron Finkle	Seats (Total: 80)
	MW 2:00pm - 3:15pm	TWS 1100

ECON458J Special Topics in Study Abroad IV; Topics in Econometrics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ECON481 Environmental Economics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (AREC326, ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON230, ECON321, BMGT230). Restriction: Must be in one of the following programs (Agricultural and Resource Economics; Agricultural and Resource Economics: Agribusiness; Environmental Science & Policy-Env Economics; Agricultural and Resource Economics: Environmental and Resource Economics; Economics Bachelor of Arts program). Cross-listed with: AREC481. Credit only granted for: ECON481 or AREC481.

An exploration of the use of economic incentives for protection of the environment and the determination of appropriate (or efficient) level of environmental quality. Also covers the choice of policy instruments for the attainment of environmental standards.

Contact department for information to register for this course.

ECON488K Applied Research Practicum; Kaulkin Ginsberg Research Fellow

(Perm req)

Credits: 3 Grading Method: Sat-Fail

Students gain experience applying economic knowledge and producing research valued by businesses, non-profits, and/or government agencies. Students engage in activities similar to what an intern or entry-level employee would perform. Students work in small groups to find different kinds of data and facts, analyze and interpret this information, and use research findings to develop and present recommendations for simulated clients.

0101	Aaron Finkle, John Hannan, Jared Lese	Seats (Total: 16)
	M 5:30pm - 7:30pm	TYD 2106
	Contact instructor or department for details.	

ECON489L Applied Economics Practicum; Financial Literacy Outreach and Training

(Perm req)

Credits: 2 Grading Method: Regular

Students gain experience explaining economic knowledge to people who have not studied economics. Students engage in activities preparing them for careers in banking, business consulting, financial education, wealth management, and related services.

0101	Cindy Clement	Seats (Total: 20)
	Tu 5:30pm - 7:00pm	TYD 1108
	Contact instructor or department for details.	

ECON490 Urban & Regional Economics: Issues and Policies

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (ECON306, ECON326); and 1 course with a minimum grade of C- from (ECON321, BMGT230, ECON230). Restriction: Must be in Economics Bachelor of Arts program. Credit only granted for: ECON398I or ECON490. Formerly: ECON398I.

Exploration of urban and regional economics and policies, including economic forces leading to formation of city and regional networks. Conceptual and empirical analysis of policies affecting land use, housing, transportation and other aspects of sub-national economic development.

0101	Nicholas Montgomery	Seats (Total: 40)
	MW 9:00am - 10:15am	TYD 1118
0201	Nicholas Montgomery	Seats (Total: 40)
	MW 10:30am - 11:45am	TYD 1118

ECON498A Special Topics in Economic Analysis; Economic and Social Policy Analysis

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Selected topics in economic analysis. Designed to meet the changing interests of students and staff.

Prerequisite: Minimum grade of C- in ECON326 and ECON422. Restriction: Must be in Economics Bachelor of Science program. Analysis of current economic and social policy issues, with an emphasis on evidence relevant to the evaluation of policy options. Topic areas may include poverty, education, immigration, environmental regulation, the tax code and others. Course will focus on the generation and assessment of evidence on the design and implementation of policies and programs in the selected topic areas.

0101	Katharine Abraham	Seats (Total: 20)
	MW 9:00am - 10:15am	TYD 1132

ECON499 Independent Research in Economics

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail

Directed research under the supervision of a faculty member. Contact department for additional information.

Contact department for information to register for this course.

ECON601 Macroeconomic Analysis I

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of BSOS-Economics department.

Introductory technical treatment of standard Keynesian, classical and new classical macroeconomic models. Expectations formation and microeconomic foundations of consumption, investment, money demand, and labor market behavior.

0101	John Shea, Allan Drazen	Seats (Total: 45)	
	MW 9:30am - 10:45am	TYD 1114	
	M 5:00pm - 6:45pm	TYD 1108	Discussion

ECON603 Microeconomic Analysis I

(Perm req)

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Permission of BSOS-Economics department.

A detailed treatment of the theory of the consumer and of the firm, particularly emphasizing the duality approach. Topics include the household production model, imperfect competition, monopolistic and oligopolistic markets.

0101	Lawrence Ausubel, Emel Filiz Ozbay	Seats (Total: 50)	
	TuTh 2:00pm - 3:15pm	TYD 0102	
	Tu 5:15pm - 6:45pm	TYD 0102	Discussion

ECON616 Economic Development II

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: ECON615, ECON603, and ECON604; or permission of BSOS-Economics department.

Survey of a variety of models explaining how market failures may lead to poverty and underdevelopment, with an emphasis on the empirical evaluation of constraints faced by individuals in developing countries and the programs that attempt to alleviate those constraints. Topics include: agricultural and land markets, labor markets, human capital in developing countries, credit markets, and consumption smoothing and risk coping.

0101	Jessica Goldberg	Seats (Total: 30)	
	MW 2:00pm - 3:15pm	TYD 3100	

ECON623 Econometrics I

(Perm req)

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: Must have advanced knowledge of probability, statistics, and linear algebra. Restriction: Permission of BSOS-Economics department.

Specification, estimation, hypothesis testing and prediction in the classical and generalized linear regression model. Topics include: ordinary least squares, generalized least squares, instrumental variable estimation, quantile regression, finite and large sample analysis and general testing principles including misspecification tests. The course will also provide instructions on the use of a major statistical packagesuch as Stata or TSP.

0101	Guido Kuersteiner	Seats (Total: 41)	
	TuTh 11:00am - 12:15pm	KEY 0126	
	Th 5:15pm - 7:00pm	TYD 0102	Discussion

ECON625 Computational Economics

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ECON604 and ECON624. Credit only granted for: ECON625 or ECON698R. Formerly: ECON698R.

An examination of the specification, computation, estimation and interpretation of structural models that are widely used in Industrial Organization, and in a range of other applied microeconomic contexts (marketing and public, environmental, education and urban economics). The focus will be on the connections between these models and relevant economic theories, and on the details of their implementation in practice.

0101	Andrew Sweeting	Seats (Total: 20)	
	F 10:00am - 12:50pm	SQH 2113	

ECON626 Empirical Microeconomics

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ECON624. Restriction: Must be in Economics (Doctoral) program.

To provide students with the opportunity to use empirical techniques that are particularly valuable in the analysis of microeconomic data. Topics include panel data, nonlinear optimization, limited dependent variables, truncated, censored, selected samples, the analysis of natural experiments, and quantile regressions. This course will emphasize hands-on practical experience.

0101	Owen Ozier, Pamela Jakiela	Seats (Total: 23)	
	F 1:30pm - 4:30pm	TYD 2108	

ECON635 Experimental Economics

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of instructor.

An introduction to the methodology of laboratory and field experiments. The course concentrates on a series of experiments to show how experiments build on one another, allowing researchers with different theoretical dispositions to narrow the range of potential disagreement.

0101	Erkut Ozbay	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	TYD 1108

ECON637**Decision Theory**

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: ECON603 and ECON604. Restriction: Must be in the Economics program; or must have completed ECON603 and ECON604 with a letter grade of B+ or better. Credit only granted for: ECON698B or ECON637. Formerly: ECON698B.

Decision making is a process in which we select a course of action among available options. This course will explore the various behavioral biases observed in decision making processes by adjusting our normative theories to capture these biases.

0101	Yusuf Masatlioglu	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	TYD 2109

ECON641**Microeconomic Analysis**

Credits: 3

Grading Method: Regular,
Audit

Restriction: Must be in M.Prof.Studies: Applied Economics program; or permission of BSOS-Economics department. Credit only granted for: ECON641 or ECON506. Formerly: ECON506.

Microeconomic analysis applied to public policy problems with an emphasis on practical examples and how they illustrate microeconomic theories. Policy issues such as pollution, welfare and income distribution, market design, industry regulation, price controls, tax policy and health insurance are practical examples used to illustrate the abstract principles of microeconomics.

PCE1	Aaron Finkle	Seats (Total: 30)
	W 6:30pm - 9:15pm	TYD 1108
	<i>Must be in Applied Economics-UMCP program. For permission to enroll, contact oes@umd.edu.</i>	

PR01	Lucas Goodman	Seats (Total: 23)
	Meets August 26, 2019 - November 15, 2019	
	Tu 6:45pm - 9:30pm	Location: TBA
	Class time/details on ELMs	ONLINE Discussion
	<i>Must be in Applied Economics-WDC program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu. Class meets at 1400 16th Street NW., Washington, DC.</i>	

ECON642

Topics in Applied Macroeconomics

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in M.Prof.Studies: Applied Economics program; or permission of BSOS-Economics department.

Focus is on applied macroeconomic models used by federal agencies to explain and predict economic behavior. Course emphasizes macroeconomic data: NIPA accounts, GDP, construction and application of CPI, labor force data and economic indicators. Students will also study a selected set of current macroeconomic topics including models of economic growth, economic fluctuations, monetary policy, inflation and financial markets.

PCE1	Rafael Lopez-Monti	Seats (Total: 30)
	M 6:30pm - 9:15pm	TYD 2102
	<i>Must be in Applied Economics-UMCP program. For permission to enroll, contact oes@umd.edu.</i>	

ECON643

Empirical Analysis I: Foundations of Empirical Research

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: ECON643 or ECON521. Formerly: ECON521.

Fundamental aspects of data management and interpretation emphasizing sampling, descriptive statistics, index numbers and construction of aggregated variables. Students will learn probability theory, confidence intervals, hypothesis testing and regression analysis using the EXCEL spreadsheet program and STATA statistical software.

PCE1	John Straub	Seats (Total: 30)
	Tu 6:30pm - 9:15pm	TYD 2111
	<i>Must be in Applied Economics-UMCP program. For permission to enroll, contact oes@umd.edu.</i>	

PR01	John Hao	Seats (Total: 23)
	Meets August 26, 2019 - November 15, 2019	
	M 6:45pm - 9:30pm	Location: TBA
	Class time/details on ELMs	ONLINE Discussion
<i>Must be in Applied Economics-WDC program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu. Class meets at 1400 16th Street NW., Washington, DC.</i>		

ECON645

Empirical Analysis III: Econometric Modeling and Forecasting

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ECON644. Credit only granted for: ECON645 or ECON523. Formerly: ECON523.

Study of empirical techniques that are particularly relevant to the analysis of microeconomic models. Emphasis is on advanced panel data methods, time series regressions, instrumental variables, limited dependent variables, and sample selection corrections.

PCE1	Moises Yi	Seats (Total: 27)
	Tu 6:30pm - 9:15pm	TYD 2102
<i>Must be in Applied Economics-UMCP program. For permission to enroll, contact oes@umd.edu.</i>		
PR01	Cristina Tello-Trillo	Seats (Total: 23)
	Meets August 26, 2019 - November 15, 2019	
	M 6:45pm - 9:30pm	Location: TBA
	Class time/details on ELMs	ONLINE Discussion
<i>Must be in Applied Economics-WDC program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu. Class meets at 1400 16th Street NW., Washington, DC.</i>		

ECON670

Financial Economics

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ECON641; and must have completed or be concurrently enrolled in ECON644.

Restriction: Must be in M.Prof.Studies: Applied Economics program.

The course applies microeconomic theory and applied econometric techniques to the study of financial institutions and markets for financial assets. Students will learn how economists model and estimate the value of financial assets. The economic and empirical models are of interest to public policy makers and private wealth managers. Specific topics can include financial intermediation, the regulation of financial institutions, risk management, portfolio theory, the capital asset pricing model and the efficient markets hypothesis.

PR01	Joonkyu Choi	Seats (Total: 23)
	Meets August 26, 2019 - November 15, 2019	
	W 6:45pm - 9:30pm	Location: TBA
	Class time/details on ELMs	ONLINE Discussion
	<i>Must be in Applied Economics-WDC program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu. Class meets at 1400 16th Street NW., Washington, DC.</i>	

ECON672 Program Analysis and Evaluation

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ECON641 and ECON645.

Students study the tools used to evaluate the effectiveness of public policies. All evaluations have weaknesses, and some have more weaknesses than others. You will learn how to distinguish high from low quality evaluations. We will discuss the basic economics and econometrics of program evaluation, focusing on the application of methods used for causal inference and cost-benefit analyses in public policy contexts. We will examine published evaluation research with the intent of showing how the research does or does not lead to clear conclusions regarding program performance.

PCE1	Maria Alva	Seats (Total: 27)
	W 6:30pm - 9:15pm	TYD 2102
	<i>Must be in Applied Economics-UMCP program. For permission to enroll, contact oes@umd.edu.</i>	

ECON673 Information, Game Theory and Market Design

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ECON641; and must have completed or be concurrently enrolled in ECON644.

A study of the strategic decision-making and the theory and practice of market design. Focus is on the design of organized market and incentives created by market rules. Topics include online auction markets, government auctions procurement auctions and matching markets. The analysis includes documenting the rules of real-world markets, game theoretic analysis, empirical analysis, and experimental work.

PR01	David Ovadia	Seats (Total: 23)
	Meets August 26, 2019 - November 15, 2019	
	Tu 6:45pm - 9:30pm	Location: TBA
	Class time/details on ELMs	ONLINE Discussion
<i>Must be in Applied Economics-WDC program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu. Class meets at 1400 16th Street NW., Washington, DC.</i>		

ECON674 Economic Analysis of Law

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ECON641; and must have completed or be concurrently enrolled in ECON644.

A study of the application of economics to law with a focus on game theory, strategic behavior and public policy.

PR01	David Burk	Seats (Total: 23)
	Meets August 26, 2019 - November 15, 2019	
	W 6:45pm - 9:30pm	Location: TBA
	Class time/details on ELMs	ONLINE Discussion
<i>Must be in Applied Economics-WDC program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu. Class meets at 1400 16th Street NW., Washington, DC.</i>		

ECON675 Environmental Economics

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ECON641; and must have completed or be concurrently enrolled in ECON645.

A study of the nature of environmental regulation focusing on U.S. environmental policies and policy debates.

PCE1	Hong Kim	Seats (Total: 27)
	M 6:30pm - 9:15pm	TYD 1101
<i>Must be in Applied Economics-UMCP program. For permission to enroll, contact oes@umd.edu.</i>		

ECON683 International Macroeconomics and Finance

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ECON641 and ECON642; and must have completed or be concurrently enrolled in ECON644. Restriction: Must be in M.Prof.Studies: Applied Economics program.

Economic analysis of international macroeconomic issues and policy. Topics can include the study of exchange rates, balance of payments, international financial markets, international business cycles, contagion, and the roles played by international economic institutions.

PCE1	Mahsa Agha Gholizadeh	Seats (Total: 27)
	Th 6:30pm - 9:15pm	TYD 2111
<i>Must be in Applied Economics-UMCP program. For permission to enroll, contact oes@umd.edu.</i>		
PR01	Daniel Fried	Seats (Total: 23)
	Meets August 26, 2019 - November 15, 2019	
	Th 6:45pm - 9:30pm	Location: TBA
	Class time/details on ELMs	ONLINE Discussion
<i>Must be in Applied Economics-WDC program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu. Class meets at 1400 16th Street NW., Washington, DC.</i>		

ECON698 Selected Topics in Economics

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Contact department for information to register for this course.

ECON701 Advanced Macroeconomics I

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ECON602 and ECON601.

Recent developments in macroeconomics with an emphasis on topics and techniques useful for conducting research in macroeconomics. Topics include advanced treatment of fiscal and monetary policy issues; the role of imperfect competition; real, sectoral and nominal business cycle models.

0101	John Haltiwanger	Seats (Total: 25)
	MW 2:00pm - 3:15pm	TYD 2102

ECON703 Advanced Microeconomics I

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ECON604 and ECON603.

A formal treatment of game theory and its microeconomic applications is presented. Equilibrium concepts for static and dynamic games, and games with complete and incomplete information are studied. Topics also discussed: the relation between games in strategic form and games in extensive form, equilibrium refinement, Bayesian games, multi-dimensional mechanism design, dominant strategy and Bayesian implementation, Nash-in-Nash bargaining solutions.

0101	Daniel Vincent	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	TYD 1108

ECON708 Advanced Topics in Applied and Theoretical Microeconomics

(Perm req)

Credits: 2 Grading Method: Regular,
Audit

Read, discuss, and analyze current topics in microeconomics, including public economics, environmental economics, labor economics, industrial economics, microeconomic theory, public choice and international trade. Specific topics covered will change from semester to semester depending on the students' and faculty's interests. Intended primarily for students beginning thesis research in economics.

0601	Katharine Abraham	Seats (Total: 5)
	MW 12:30pm - 1:45pm	Location: TBA
2901	Melissa Kearney	Seats (Total: 5)
	MW 12:30pm - 1:45pm	Location: TBA
4401	Nolan Pope	Seats (Total: 5)
	MW 12:30pm - 1:45pm	TYD 0111
5501	Peter Murrell	Seats (Total: 5)
	MW 12:30pm - 1:45pm	Location: TBA

ECON709**Advanced Topics in Applied and Theoretical Macroeconomics**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Read, discuss, and analyze current topics in macroeconomics, including asset pricing models, models of economic growth, investment, and the labor market. Specific topics covered will change from semester to semester depending on the students' and faculty's interests. Intended primarily for students beginning thesis research in economics.

0101	Allan Drazen	Seats (Total: 5)
	TuTh 12:30pm - 1:45pm	TYD 0102
0301	Eunhee Lee	Seats (Total: 5)
	TuTh 12:30pm - 1:45pm	Location: TBA
0401	Felipe Saffie	Seats (Total: 5)
	TuTh 12:30pm - 1:45pm	Location: TBA
4101	L Stevens	Seats (Total: 5)
	TuTh 12:30pm - 1:45pm	Location: TBA

ECON721**Econometrics III**

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: ECON624; or permission of BSOS-Economics department.

Oriented towards macro-econometric methods. Topics covered will be selected from the following: Further discussion of topics covered in ECON624, nonlinear time series models, exogeneity and causality, non-stationary time series models (unit roots, co-integration, error correction models, vector autoregressive models), econometric models of volatility (ARCH and GARCH models, and Stochastic volatility models), rational expectations models, non-stationary panel data models, tests for structural change, Bayesian econometrics and methods for Bayesian computation.

0101	John Chao	Seats (Total: 20)
	TuTh 5:00pm - 6:15pm	TYD 2108

ECON742**Advanced International Economics II**

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: ECON603; or permission of BSOS-Economics department.

Comparative advantage, Heckscher-Ohlin theory, specific-factors model, empirical verification, economies of scale, imperfect competition, commercial policy, factor mobility.

0101	Nuno Limao	Seats (Total: 9)
	TuTh 11:00am - 12:15pm	JMZ 3118

ECON747 The Macroeconomics of Imperfect Capital Markets

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: ECON602 and ECON601; or (ECON604 and ECON603); or permission of BSOS-Economics department. Restriction: Must be in one of the following programs (Economics (Master's); Economics (Doctoral)). Credit only granted for: ECON698K or ECON747. Formerly: ECON698K.

After a brief overview of the micro-foundations of capital market imperfections, topics include limited commitment, the financial accelerator, liquidity, bubbles, crises, the role of credit in monetary economics as well as international capital flows.

0101	Thomas Drechsel	Seats (Total: 15)
	MW 11:00am - 12:15pm	TYD 3100

ECON754 Topics in Political Economy I

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: ECON602 and ECON604; or permission of BSOS-Economics department.

Study of political determinants of macroeconomic outcomes. Time inconsistency in monetary and fiscal policy, political business cycles. Political models of redistribution, delay in reform, transition, growth, and international policymaking.

0101	Allan Drazen	Seats (Total: 20)
	MW 11:00am - 12:15pm	TYD 1132

ECON771 Advanced Labor Economics: Theory and Evidence

(Perm req)

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: ECON603 and ECON624; or permission of BSOS-Economics department. Restriction: Must be in the Economics Doctoral program.

Modern analytical and quantitative labor economics. Labor supply decisions of individuals and households; human capital model and distribution of income. Demand for labor; marginal productivity theory, imperfect information and screening. Interaction of labor demand and supply; unemployment; relative and absolute wages; macroeconomic aspects of the labor market.

0101	Sergio Urzua	Seats (Total: 10)
	MW 9:00am - 10:15am	TYD 2111

ECON799

Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ECON808

Workshop on Macroeconomics, International Macroeconomics and International Finance; Workshop in Applied Economics

Credits: 2 Grading Method: Sat-Fail,
Audit

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0101	Eunhee Lee	Seats (Total: 10)
	W 3:30pm - 5:30pm	SQH 1119
1301	Felipe Saffie	Seats (Total: 10)
	W 3:30pm - 5:30pm	Location: TBA
3501	L Stevens	Seats (Total: 10)
	W 3:30pm - 5:30pm	Location: TBA

ECON828

Workshop in Econometrics

Credits: 2 Grading Method: Sat-Fail,
Audit

Current research in econometrics. Topics drawn from theoretical and applied econometrics. Special topics include: maximum likelihood and generalized method of moments estimation of linear and non-linear models, analysis of stationary and non-stationary time series, cross section time series estimation, spatial estimation methods, Bayesian methods, semi-and non-parametric methods, rational expectations models, numerical methods, and various applications.

0101	Instructor: TBA	Seats (Total: 20)
	M 3:30pm - 5:00pm	Location: TBA

ECON848 Workshop in International Trade, Institutional Economics and Political Economy

Credits: 2 Grading Method: Sat-Fail,
 Audit

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2102	Peter Murrell	Seats (Total: 20)
	M 3:30pm - 5:30pm	TYD 2110

ECON868 Workshop in Industrial Organization, Microeconomic Theory and Behavioral and Experimental Economics

Credits: 2 Grading Method: Sat-Fail,
 Audit

Workshops designed to provide a structured environment for our faculty and graduate students to meet regularly to discuss and present their research ideas.

2901	Emel Filiz Ozbay	Seats (Total: 20)
	Tu 3:30pm - 5:30pm	TYD 1108
4701	Yusuf Masatlioglu	Seats (Total: 20)
	Tu 3:30pm - 5:30pm	Location: TBA

ECON878 Workshop in Development, Labor and Public Economics

Credits: 2 Grading Method: Sat-Fail,
 Audit

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0601	Katharine Abraham	Seats (Total: 10)
	Th 3:30pm - 5:30pm	TYD 1118
5801	Nolan Pope	Seats (Total: 10)
	Th 3:30pm - 5:30pm	Location: TBA

ECON898 Pre-Candidacy Research

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ECON899 Doctoral Dissertation Research

(Perm req)

Credits: 6

Grading Method: Regular

Contact department for information to register for this course.

EDCP

Education Counseling and Personnel Services

Fall 2019

EDCP104

Diversity Exploration and Academic Strategies

(Perm req)

Credits: 1

Grading Method: Regular

Additional information: Enrollment is for first-year students enrolled in the College Success Scholars program.

Designed to assist first semester students enrolled in the College Success Scholars program through an introduction to the academic environment, acclimation of campus resources, assistance in skill development and academic strategies, appreciation of cultural diversity as well as awareness of social identities for achieving positive personal, academic and professional outcomes.

Class will meet in TWS 1310.

0101	Christopher Lester	Seats (Total: 20)
	W 6:00pm - 7:50pm	Location: TBA

EDCP107

Diversity Issues: College Academic Advancement and Career Exploration

Credits: 1

Grading Method: Regular

Additional information: This course is primarily designed for 1st and 2nd-year students enrolled at the University of Maryland (UMD) and want to learn effective academic strategies and career explorations.

Designed to enable undergraduate students to foster To foster positive attitudes and behaviors that will improve their academic success at the University of Maryland, College Park, teach students effective interpersonal skills and academic behaviors needed to succeed in higher education, encourage students to participate in career exploration as an essential part of the acquisition of a college education, establish the Nyumburu Cultural Center as a place where students can receive assistance in social, academic, and cultural areas, assist students in the understanding and development of attitudes that can facilitate scholarly engagements, understand student activism, scholarly participation, and cultural involvement as visions for academic excellence.

Seniors can be admitted on an individual basis by approval from the instructor.

0101	Solomon Comissiong, Ronald Zeigler	Seats (Total: 25)
	M 10:00am - 10:50am	NCC 0120

EDCP108I

College and Career Advancement: Concepts and Skills; Academic Transitions to Internships

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Knowledge and skills designed to enhance college as a learning experience or preparation for life.

Restricted to students with less than 105 cumulative credits. Recommended for students who have never had an internship and are actively searching for one. Students participating in this course will engage in the full experience of searching for an internship Course registration is closed to graduating seniors.

0101	Erica Ely Meets August 26, 2019 - October 11, 2019 Class time/details on ELMs	Seats (Total: 30) ONLINE
0201	Natalie Sullivan Meets August 26, 2019 - October 11, 2019 Class time/details on ELMs	Seats (Total: 30) ONLINE
0301	Erin Rooney-Eckel Meets October 21, 2019 - December 7, 2019 Class time/details on ELMs	Seats (Total: 30) ONLINE
0401	Erica Ely Meets October 21, 2019 - December 7, 2019 Class time/details on ELMs	Seats (Total: 30) ONLINE
0501	Erin Rooney-Eckel Meets October 21, 2019 - December 7, 2019 Class time/details on ELMs	Seats (Total: 30) ONLINE
0701	Sarah Vollaro Meets August 26, 2019 - October 11, 2019 Class time/details on ELMs <i>This section is restricted to CMNS students only.</i>	Seats (Total: 30) ONLINE

0801	Erin Rooney-Eckel	Seats (Total: 30)
	Meets August 26, 2019 - October 11, 2019	
	Class time/details on ELMs	ONLINE
	<i>Restricted to CIVICUS students only.</i>	

EDCP210

Peer Counseling Skills and Mental Health Advocacy

Credits: 3

Grading Method: Regular

General Education: DSSP

Restriction: Must not have completed EDCP310; and must not have completed PSYC433. Credit only granted for: EDCP210, EDCP310, or PSYC433.

Introduction to core helping skills in peer counseling settings and three predominant theoretical approaches used in the counseling field (humanistic, psychodynamic, cognitive-behavioral). The course also explores mental health stigma and advocacy. Students will build an understanding of the practical application of underlying principles and theory in counseling and the helping professions, while exploring their own, and societal, biases, assumptions, and attitudes toward mental health.

0101	Priya Bansal	Seats (Total: 18)
	MW 11:00am - 12:15pm	EDU 3233
0201	Alexandria Travis	Seats (Total: 18)
	TuTh 2:00pm - 3:15pm	JUL 1105
0301	Samantha Sommer	Seats (Total: 18)
	TuTh 2:00pm - 3:15pm	EDU 2101
0401	Jocelyn Yao	Seats (Total: 18)
	MW 1:00pm - 2:15pm	KEY 0119
0501	Kristin Meyering	Seats (Total: 18)
	TuTh 11:00am - 12:15pm	EDU 3233
0701	Bhanu Moturu	Seats (Total: 18)
	MW 10:00am - 11:15am	LEF 1222

EDCP298

Special Problems in Counseling and Personnel Services

Credits: 1-3

Grading Method: Regular,
Pass-Fail

Individual instruction in special problems related to counseling, student leadership, and college student development.

Contact department for information to register for this course.

EDCP298Z Special Problems in Counseling and Personnel Services; British Life and Society in a Cross-Cultural Context

Credits: 3 Grading Method: Regular,
Pass-Fail

Individual instruction in special problems related to counseling, student leadership, and college student development.

Contact department for information to register for this course.

EDCP386 Experiential Learning

(Perm req)

Credits: 3-6 Grading Method: Regular

Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department; and sophomore standing or higher.

Special EDCP form required.

Contact department for information to register for this course.

EDCP489 Field Experiences in Counseling and Personnel Services

(Perm req)

Credits: 1-4 Grading Method: Regular General Education: DVUP

Planned field experience in education-related activities. Credit not to be granted for experiences accrued prior to registration.

Contact department for information to register for this course.

EDCP498 Special Problems in Counseling and Personnel Services

(Perm req)

Credits: 1-3 Grading Method: Regular

Available only to major students who have formal plans for individual study of approved problems.

Contact department for information to register for this course.

EDCP610 Professional Orientation

Credits: 3 Grading Method: Regular,
Audit

Survey of knowledge base and practices in counseling and personnel services specializations, professional ethics, credentialing relevant legislation, current issues.

For Student Affairs students only.

0101	Michelle Espino	Seats (Total: 15)
	W 9:00am - 11:45am	EDU 3236
<i>Restricted to Student Affairs Concentration masters students.</i>		
0201	Natasha Mitchell	Seats (Total: 20)
	M 4:15pm - 7:00pm	Location: TBA
<i>Limited to School Counseling Students.</i>		

EDCP614 Counseling Skills: Introduction to Practicum

Credits: 3 Grading Method: Regular,
Audit

Corequisite: EDCP616.

Development and utilization of counseling skills.

0101	Kelly Lee	Seats (Total: 35)
	Tu 1:00pm - 3:50pm	ARC 1105

EDCP615 Counseling I: Appraisal

Credits: 3 Grading Method: Regular,
Audit

Corequisite: EDCP618. Restriction: Must be in a major within EDUC-Counseling, Higher Education and Special Education department.

*Collection and interpretation of appraisal data, synthesis of data through case study procedures.
Development of interview skills.*

0101	Jessica McKechnie	Seats (Total: 11)
	Th 4:15pm - 7:00pm	EDU 2119

EDCP616 Counseling II: Theory and Practice

Credits: 3 Grading Method: Regular,
Audit

Corequisite: EDCP614.

Counseling theories and the practices which stem from such theories.

For EDCP majors only.

0101	Mary Ann Hoffman	Seats (Total: 26)
	Tu 4:15pm - 7:00pm	EDU 3315
<i>Limited to Students in the Masters Program.</i>		

EDCP618 Counseling Skills: Introduction to Practicum

Credits: 1 Grading Method: Regular,
Audit

Development and utilization of counseling skills.

0101	Kelly Lee	Seats (Total: 5)
Contact instructor or department for details.		

EDCP619B Practicum in Counseling

Credits: 3 Grading Method: Regular,
Audit

Sequence of supervised counseling experiences of increasing complexity. Limited to eight applicants in advance. Two hours class plus laboratory.

0101	Noah Collins	Seats (Total: 4)
	Th 1:00pm - 3:45pm	SHM 1106
Contact instructor or department for details.		
<i>Restricted to second-year Student Affairs masters students approved for Counseling Practicum participation.</i>		

EDCP622 Human Development in the Counseling Context

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: EDCP789X or EDCP622. Formerly: EDCP789X.

An examination of the development of individuals over the lifespan. A focus on human development theories and the ways in which those theories are utilized within the counseling process to promote optimal development of individuals and families across the lifespan.

0101	Paul Gold	Seats (Total: 20)
	Th 4:15pm - 7:00pm	EDU 3233

Cognitive Assessment

Assessment of cognitive functioning of children and adolescents in reference to school learning and behavior problems. Administering, scoring and interpreting cognitive assessment instruments commonly used in school systems.

0101	Kelly Lee	Seats (Total: 7)
	W 9:00am - 11:45am	Location: TBA

School Consultation I

Theory and practice of consultation services in the school setting. Understanding of school culture. Introduction to problem solving model of case consultation for assessment and remediation of learning and behavior problems in the classroom. Practicum experience.

0101	Katie Burkhouse	Seats (Total: 10)
	M 4:15pm - 7:00pm	Location: TBA

School Psychology Seminar: Overview of the Specialty

Overviews the specialty of school psychology, including history of the specialty, roles and functions of school psychologists, and current professional issues related to the specialty.

0101	William Strein	Seats (Total: 10)
	M 1:00pm - 2:45pm	EDU 3236

School Psychology Seminar: Professional Ethics

Credits: 1-2 Grading Method: Regular, Audit

Restriction: Must be in the School Psychology program; or permission of instructor.

Overviews ethical issues in the specialty of school psychology.

0101	William Strein	Seats (Total: 10)
	M 2:45pm - 4:00pm	EDU 3236

EDCP652**Research in Counseling**

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in the School Counseling program. Credit only granted for: EDCP652 or EDCP789Y. Formerly: EDCP789Y.

An exploration of basic and applied research, program evaluation, and associated measurement and evaluation skills crucial for professional school counselors.

0101	Paul Gold	Seats (Total: 15)
	W 4:15pm - 7:00pm	EDU 3236

EDCP682**Counseling Psychology Didactic Practicum in Group Interventions**

Credits: 3 Grading Method: Sat-Fail

Prerequisite: For Counseling Psychology majors only. Cross-listed with PSYC682. Formerly: EDCP718.

In depth examination of theories and techniques of group interventions; supervised experience in group counseling.

0101	Dennis Kivlighan	Seats (Total: 10)
	W 11:00am - 1:50pm	Location: TBA

EDCP685**Counseling Psychology Didactic Practicum in Counseling Supervision**

Credits: 3 Grading Method: Sat-Fail

Prerequisite: For Counseling Psychology majors only. Cross-listed with PSYC685. Formerly: EDCP745.

In depth examinatin of theories and techniques of counseling supervision, supervised experience in the process of supervising counselors.

0101	Robert Lent	Seats (Total: 10)
	W 11:00am - 1:45pm	ARC 1127

EDCP692 Assessment in Counseling Psychology I

Credits: 3 Grading Method: Regular

Prerequisite: For Counseling Psychology majors only. Cross-listed with PSYC692. Formerly: EDCP789F.

Broad introduction to the construction of psychological tests and measures, and experience in test interpretation, with consideration of historical, legal, ethical, and cultural issues surrounding the assessment process.

Students must pay a \$47.00 materials fee.

0101	Roger Worthington	Seats (Total: 10)
	M 1:00pm - 4:00pm	EDU 2119

EDCP695 Ethical and Professional Issues in Counseling Psychology

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must be in the Counseling Psychology program. Also offered as: PSYC695. Credit only granted for: EDCP669, EDCP688, EDCP695, PSYC688, or PSYC695. Formerly: EDCP669 and EDCP688.

Exploration of ethical and professional issues in Counseling Psychology.

0101	Roger Worthington	Seats (Total: 10)
	Tu 11:00am - 2:00pm	JMZ 1123

EDCP697 Multicultural Issues in Counseling Psychology

Credits: 3 Grading Method: Regular

Prerequisite: Only open to Counseling Psychology majors. Credit only granted for: EDCP697, EDCP699, or PSYC697. Formerly: EDCP699.

Exploration of knowledge, attitudes and skills for providing counseling and psychological services to culturally diverse populations.

0101	Richard Shin	Seats (Total: 10)
	W 2:00pm - 5:00pm	JMZ 3118

EDCP698 advanced Didactic Practicum in Counseling Psychology

Credits: 3 Grading Method: Regular, Audit

In depth examination of approaches to or theories about intervention, and supervised experience in the application of those approaches or theories. Each practicum focuses on a particular approach, e.g., psychodynamic, cognitive-behavioral, cross-cultural.

0101	Mary Ann Hoffman	Seats (Total: 10)
	Th 1:00pm - 3:45pm	EDU 2102
	<i>Limited to Counseling Psychology Students</i>	

EDCP738 Practicum in Child Assessment

Credits: 3 Grading Method: Regular, Audit

Administration of complete test batteries to children; supervision of initial interviews; test administration and scoring; interpretation and synthesis of test battery and interview material; the psychological report; verbal interpretation of test results; and recommendations. Taken initially with EDCP 633; repeated with EDCP 634 in the subsequent semester.

0101	William Young	Seats (Total: 7)
	Tu 9:00am - 12:15pm	Location: TBA

EDCP741 Multicultural Practice in Student Affairs: Self, Education, and Society

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: EDCP771. Credit only granted for: EDCP741 or EDCP789Z. Formerly: EDCP789Z.

Develop knowledge and skills in the area of multicultural practice in student affairs through the examination of oppression, power, and privilege and how these dynamics impact individuals, educational institutions, and societies.

0101	Bridget Kelly	Seats (Total: 20)
	Th 4:15pm - 7:00pm	EDU 2101

EDCP746 Clinical Supervision of Pupil Personnel Services

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Advanced Doctoral Students Only. Restriction: Permission of instructor.

Supervision of role of psychologists and counselors in school settings; applied skills in supervision of services.

0101	Cixin Wang	Seats (Total: 10)
	W 9:45am - 12:30pm	JMZ 1123

EDCP774 Advanced Seminar in Theories of College Student Development

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: EDCP771; or students who have taken courses with comparable content may contact the department.

An opportunity for in-depth study, dialogue, and reflection about theoretical frameworks for understanding the development of college students. Specific attention is given to enhancing knowledge and understanding of the development of students when social identities and their intersections are considered.

0101	Candace Moore	Seats (Total: 15)
	Th 1:00pm - 3:45pm	ARC 1105

EDCP789Q Advanced Topics in Counseling and Personnel Services; Developmental Psychopathology

Credits: 3 Grading Method: Regular,
 Audit

0101	Hedwig Teglassi	Seats (Total: 10)
	W 9:30am - 12:15pm	EDU 2101

EDCP789R Advanced Topics in Counseling and Personnel Services; College Teaching Seminar

(Perm req)

Credits: 1-6 Grading Method: Regular,
 Audit

0101	Michelle Espino	Seats (Total: 5)
	Contact instructor or department for details.	
5101	Candace Moore	Seats (Total: 2)
	Contact instructor or department for details.	

EDCP798 Special Problems in Counseling and Personnel Services

(Perm req)

Credits: 1-6 Grading Method: Regular,
 Audit

Master's AGS, or doctoral candidates who desire to pursue special research problems under the direction of their advisers may register for credit under this number.

Contact department for information to register for this course.

EDCP798A Special Problems in Counseling and Personnel Services; Research Design and Proposal Writing Seminar

Credits: 3 Grading Method: Regular,
 Audit

Master's AGS, or doctoral candidates who desire to pursue special research problems under the direction of their advisers may register for credit under this number.

0101	Dawn Culpepper	Seats (Total: 10)
	Th 9:00am - 11:45am	EDU 2119
0201	Kimberly Griffin	Seats (Total: 10)
	Th 9:00am - 11:45am	EDU 2101

EDCP799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Registration required to the extent of six hours for Master's thesis.

Contact department for information to register for this course.

EDCP799A Master's Thesis Research; Research Design and Proposal Writing Seminar

Credits: 1-6 Grading Method: Regular, Sat-
 Fail

Registration required to the extent of six hours for Master's thesis.

0101	Dawn Culpepper	Seats (Total: 10)
	Th 9:00am - 11:45am	EDU 2119
0201	Kimberly Griffin	Seats (Total: 10)
	Th 9:00am - 11:45am	EDU 2101

EDCP870 Professional Issues Seminar

Credits: 3 Grading Method: Regular,
 Audit

Credit only granted for: EDCP656 or EDCP870. Formerly: EDCP656.

Examination of issues that bear on professional issues such as ethics, inter-professional relationships and research.

0101	Michelle Espino	Seats (Total: 20)
	Tu 4:15pm - 7:00pm	KEY 0117
<i>Only open to HESI Doctoral students.</i>		

EDCP871 Student Affairs Doctoral Capstone Seminar

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: EDCP870; or permission of instructor. Restriction: Must be in the College Student Personnel program. Credit only granted for: EDCP789I or EDCP871. Formerly: EDCP789I.

Broadening perspectives on issues in student affairs and higher education by exploring the multiple roles and responsibilities of campus administrators and faculty members.

0101	Mary Hummel	Seats (Total: 15)
	W 2:00pm - 5:00pm	JMZ 3203

EDCP888 Apprenticeship in Counseling and Personnel Services

(Perm req)

Credits: 1-8 Grading Method: Regular,
Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

Contact department for information to register for this course.

EDCP888A Apprenticeship in Counseling and Personnel Services; College Student Personnel

Credits: 3 Grading Method: Regular,
Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

0101	Marsha Guenzler-Stevens, Kristan Skendall	Seats (Total: 10)
Contact instructor or department for details.		

EDCP888C Apprenticeship in Counseling and Personnel Services; School Psychology

Credits: 1-8 Grading Method: Regular

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

0101	Hedwig Teglas	Seats (Total: 15)
	W 4:00pm - 7:00pm	JMZ 0205
0201	Hedwig Teglas	Seats (Total: 15)
	Contact instructor or department for details.	

EDCP888G Apprenticeship in Counseling and Personnel Services; School Counseling

Credits: 3 Grading Method: Regular,
 Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

0101	Jessica McKechnie	Seats (Total: 15)
	M 7:00pm - 9:45pm	EDU 3233

EDCP889 Internship in Counseling and Personnel Services; Internship in Counseling and Personnel Services

Credits: 1-8 Grading Method: Regular,
 Audit

Internship experiences at a professional level of competence in a particular role with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students advanced to candidacy for doctoral degree.

Contact department for information to register for this course.

EDCP898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

EDCP899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Registration required to the extent of 12-18 hours for a Ph.D. Dissertation.

Contact department for information to register for this course.

EDHD201**Learning How to Learn**

Credits: 3

Grading Method: Regular

General Education: DSHS

Immerses students in the theoretical and empirical study of learning by engaging them in orchestrated experiences and activities drawn directly from the disciplinary research. Students achieve deep understanding of their own learning, as well as the means of enhancing that learning both in school and out-of-school contexts.

0101	Patricia Alexander	Seats (Total: 25)	
	MW 11:00am - 11:50am	ESJ 2204	
	M 12:00pm - 12:50pm	ASY 3211	Lab
0102	Patricia Alexander	Seats (Total: 25)	
	MW 11:00am - 11:50am	ESJ 2204	
	W 12:00pm - 12:50pm	ASY 3207	Lab
0103	Patricia Alexander	Seats (Total: 25)	
	MW 11:00am - 11:50am	ESJ 2204	
	F 12:00pm - 12:50pm	EDU 1107	Lab
0104	Patricia Alexander	Seats (Total: 25)	
	MW 11:00am - 11:50am	ESJ 2204	
	M 1:00pm - 1:50pm	EDU 1121	Lab
0105	Patricia Alexander	Seats (Total: 25)	
	MW 11:00am - 11:50am	ESJ 2204	
	W 1:00pm - 1:50pm	ASY 3207	Lab
0106	Patricia Alexander	Seats (Total: 25)	
	MW 11:00am - 11:50am	ESJ 2204	
	F 1:00pm - 1:50pm	EDU 1107	Lab

EDHD210**Foundations of Early Childhood Education**

(Perm req)

Credits: 3

Grading Method: Regular

CORE: HO

General Education: DSHS

Restriction: Permission of EDUC-Human Development and Quantitative Methodology department.

Students explore historical and current research in early childhood education, primary models of curriculum and pedagogy in the field, and the relationship between critical aspects of young children's development and the creation of inclusive learning opportunities for all children, including children at risk. The concept of developmentally appropriate practice and its application across different developmental levels and early childhood classrooms will be introduced and connected with discussion in EDHD220 and EDSP211. Students examine issues in developing and implementing high quality early childhood education experiences for young children with and without disabilities, including the influence of family, culture, and community, the needs of children at risk (e.g., poverty, immigrant status, English Language Learners), and the role of assessment in early learning.

0101	Francine Marchese	Seats (Total: 25)
	Tu 4:15pm - 7:00pm	JMZ 2123

EDHD306

Research Methods in Human Development

Credits: 3

Grading Method: Regular

General Education: FSAR

Addresses the scientific concepts and principles central to the study of human behavior and development. Students will learn about basic research methods in studying human behavior in developmental context and will participate in experiential activities, such as conducting observations and collecting self-report data. Major themes: goals of developmental research, fundamental research designs, types of measurement, elements of good scientific writing, and ethical issues in the study of human development.

0101	Yixun Li	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	EDU 1121
0201	Anisha Singh	Seats (Total: 40)
	MW 2:00pm - 3:15pm	TWS 1310

EDHD310

Your Brain on Education: The Neuroscience of Learning and Development

Credits: 3

Grading Method: Regular

General Education: DSHS,
SCIS

Prerequisite: PSYC100.

0101	Donald Bolger	Seats (Total: 50)
	TuTh 11:00am - 12:15pm	TWS 1310

0101	Donald Bolger	Seats (Total: 35)
	Th 1:00pm - 3:00pm	EDU 3315
	Contact instructor or department for details.	

Contact department for information to register for this course.

General Education: DSHS

Central concepts related to parameters of human development, individual and social, which arise throughout the life span. Continuity and change within the developing individual.

0101	Alexander D'Esterre	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	EDU 2119
	<i>This section is restricted to students in the Human Development Minor, (Program Code #ED05).</i>	
0201	Laura Jimenez Parra	Seats (Total: 40)
	TuTh 9:30am - 10:45am	Location: TBA

EDHD322

The Young Child as Mathematician

Credits: 3 Grading Method: Regular

Prerequisite: EDSP423, EDHD431, and EDSP315; and track 1: Must have completed EDSP 430, EDSP 433; OR Track 2: Must have completed EDHD415, EDHD 424. Corequisite: EDHD323, EDSP321, EDSP417, EDHD441, EDHD442, EDHD443, and EDHD444. Restriction: Must be in the Professional Early Childhood/Early Childhood Special Education program; and senior standing or higher; and minimum cumulative GPA of 2.75.

Provides a theoretical and instructional framework for mathematics instruction in early childhood classrooms. Development of understanding of early childhood mathematics that emphasizes how and in what environment young children learn mathematics. Current thinking about both content and instructional strategies for mathematics curriculum, including identification and review of standards and expectations for learning outcomes for all children. Assessment strategies for evaluating all children will be addressed. Includes Phase 1 Field Experience.

Restricted to major code 0822P.

0101	Geetha Ramani	Seats (Total: 26)
	W 2:00pm - 4:00pm	EDU 2121
	Contact instructor or department for details.	

EDHD323

Children Study their World

Credits: 3 Grading Method: Regular

Prerequisite: EDSP423, EDHD431, and EDSP315; and track 1: Must have completed EDSP430, EDSP433; or Track 2: Must have completed EDHD415, EDHD424. Corequisite: EDHD322, EDSP417, EDHD441, EDHD443, EDHD442, EDHD444, and EDSP321. Restriction: Must be in the Professional Early Childhood/Early Childhood Special Education program; and senior standing or higher; and minimum cumulative GPA of 2.75.

Provides theoretical and instructional framework for social studies instruction in inclusive early childhood classrooms. Course will reflect current thinking about content and instructional strategies for social studies curriculum; identification and review of standards/expectations for learning outcomes for all children; assessment strategies for evaluating of social studies objectives; use of data driven instruction to support all children; observation of children's understanding of their social world in field placements; opportunities to explore these understandings through interviews with children and the implementation of activities. Includes Phase 1 Field Experience.

Restricted to major code 0822P.

0101	Elisa Klein	Seats (Total: 26)
	W 11:00am - 1:00pm	EDU 1121
	Contact instructor or department for details.	

EDHD386

Experiential Learning

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Restriction: Permission of EDUC-Human Development and Quantitative Methodology department; and junior standing or higher.

Contact department for information to register for this course.

EDHD402

Social Development

Credits: 3 Grading Method: Regular

Recommended: EDHD411.

Social Development. Critical concepts and ideas of the study of child and adolescent social development. Focus on changes in interpersonal relationships, emotions, achievement-related behavior and competence, and functioning within the broader social context.

0101	Riley Sims	Seats (Total: 40)
	MW 2:00pm - 3:15pm	CHM 1228

EDHD411

Child Growth and Development

Credits: 3 Grading Method: Regular, General Education: DSHS
Audit

Theoretical approaches to and empirical studies of physical, psychological and social development from conception to puberty. Implications for home, school and community.

0101	Jennie Lee-Kim	Seats (Total: 40)
	W 2:00pm - 3:15pm	TWS 0205
	Class time/details on ELMs	ONLINE

EDHD412 Infant Development

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS

Infant development across domains, including perceptual, motor, cognitive, language, social and emotional functioning from pre-natal through third year of life.

0101	Lauren Trakhman	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	TYD 2108

EDHD413 Adolescent Development

Credits: 3 Grading Method: Regular General Education: DSHS

Adolescent development, including special problems encountered in contemporary culture. Observational component and individual case study.

0201	Jennie Lee-Kim	Seats (Total: 40)
	Tu 9:30am - 12:15pm	EDU 2119

EDHD425 Language Development and Reading Acquisition

Credits: 3 Grading Method: Regular, Audit

This course focuses on young children's language development and the relationship between language and reading acquisition. Students will learn: concepts central to language development; language achievements at different ages; concepts of emergent literacy; models of reading acquisition and skilled reading.

0101	Min Wang	Seats (Total: 35)
	Tu 1:00pm - 3:45pm	EDU 1107
0201	Min Wang	Seats (Total: 38)
	W 12:30pm - 3:15pm	EDU 2119

EDHD426 Cognitive and Motivational Literacy Content

Credits: 3 Grading Method: Regular

Students preparing for secondary teaching will learn about the cognitive and motivational aspects of literacy and learning from text for the content areas of literature, science, history and mathematics. Different evidenced-based literacy approaches appropriate for content learning are presented. Characteristics of learning environments that enable students to engage productively with diverse texts, disciplinary tasks, and technological resources in content areas are identified.

Restriction: Must be a Secondary Education major.

0101	Daphne Williams	Seats (Total: 38)
	W 5:30pm - 8:15pm	EDU 3315

EDHD441 Data Driven Decision Making in EC/ECSE

Credits: 1 Grading Method: Regular

Prerequisite: Minimum grade of C- in EDSP423, EDHD431, and EDSP315; and TRACK 1: Must have completed EDSP430 and EDSP433 or TRACK 2: Must have completed EDHD415 and EDHD424. Corequisite: EDHD322, EDHD323, EDSP321, EDSP417, EDHD442, EDHD443, and EDHD444.

Students will be exposed to formative (e.g., classroom based, ongoing) and summative (e.g., standardized testing) assessments. Students will collect and analyze formative assessment data from their internship classrooms as the bases of planning and delivering instruction to meet the diverse needs of all learners. They will also analyze standardized assessment data to gain an understanding of measures used to determine cross-school and cross-teacher effectiveness. Includes Phase I field experience.

Restricted to major code 0822P.

0101	Jennifer McCatharn	Seats (Total: 26)
	Meets October 14, 2019 - November 5, 2019	
	M 10:00am - 12:00pm	EDU 1121
	Contact instructor or department for details.	

EDHD442 Interventions for Children with Behavioral Challenges

Credits: 1 Grading Method: Regular

Prerequisite: Minimum grade of C- in EDSP423, EDHD431, and EDSP315; and TRACK 1: Must have completed EDSP430 and EDSP 433; or TRACK 2: Must have completed EDHD415 and EDHD 424. Corequisite: EDSP321, EDSP417, EDHD322, EDHD323, EDHD441, EDHD443, and EDHD444.

Students will expand knowledge of and develop skills to address challenging behaviors in inclusive early childhood classrooms. Students examine the causes underlying challenging behaviors during the early childhood years, and identify appropriate resources and support services for working with families to develop a unified approach when responding to behavioral challenges. Includes Phase I field experience.

Restricted to major code 0822P.

0101	Renee Garraway	Seats (Total: 26)
	Meets August 26, 2019 - October 1, 2019	
	M 10:00am - 12:00pm	EDU 1121
	Contact instructor or department for details.	

EDHD443**Interventions for Children with Social and Communication Challenges**

Credits: 1 Grading Method: Regular

Prerequisite: Minimum grade of C- in EDSP423, EDHD431, and EDSP315; and TRACK 1: Must have completed EDSP430 and EDSP 433; or TRACK 2: Must have completed EDHD415 and EDHD 424. Corequisite: EDHD322, EDSP321, EDSP417, EDHD323, EDHD441, EDHD442, and EDHD444.

Students will learn about the characteristics of children with autism spectrum disorder, pervasive developmental disorder, social communication disorder, and other related challenges and will be equipped to meet the needs of this group of children in the early childhood classroom. The utilization of Universal Design for Learning (UDL), Response to Intervention (RTI) and other early childhood special education approaches, as they apply to this specific group of children, will be addressed. Interventions designed to improve the functioning of children with autism spectrum disorders and related disorders will be reviewed. Includes Phase I field experience.

Restricted to major code 0822P.

0101	Jamell White	Seats (Total: 26)
	Meets November 11, 2019 - December 9, 2019	
	M 10:00am - 12:00pm	EDU 1121
	Contact instructor or department for details.	

EDHD444**Action Research in EC/ECSE**

Credits: 1 Grading Method: Regular

Prerequisite: Minimum grade of C- in EDSP423, EDHD431, and EDSP315; and track 1: Must have completed EDSP430 and EDSP433; OR Track 2: Must have completed EDHD415 and EDHD424. Corequisite: EDHD322, EDHD323, EDHD441, EDHD442, EDHD443, EDSP417, and EDSP321.

Students will become familiar with the EC/ECSE research process, literature and how teachers use action research to improve pedagogy and the experiences of children in classrooms or home-based contexts. Students will utilize this knowledge, as well as either a goal in an Individualized Education Plan (IEP) or Individualized Family Service Plan (IFSP) or School Improvement Plan (SIP), to develop an action research study commenced during the following semester. Includes Phase I field experience.

Restricted to major code 0822P. Class meets 9/16/19, 10/07/19, 11/04/19, 11/18/19, and 12/02/19.

0101	Judith Anderson	Seats (Total: 26)
	Meets September 16, 2019 - December 2, 2019	
	M 4:15pm - 6:15pm	EDU 3315
	Contact instructor or department for details.	

EDHD460
Educational Psychology

Credits: 3 Grading Method: Regular, General Education: DSHS
 Audit

Prerequisite: PSYC100; or permission of EDUC-Human Development and Quantitative Methodology department.

Application of psychology to learning processes and theories. Individual differences, measurement, motivation, emotions, intelligence, attitudes, problem solving, thinking and communicating in educational settings.

0101	Anisha Singh	Seats (Total: 40)
	MW 11:00am - 12:15pm	ASY 3203

EDHD489
Field Experiences in Education

(Perm req)

Credits: 1-4 Grading Method: Regular,
 Pass-Fail, Audit

Planned field experience in education-related activities. Credit not to be granted for experiences accrued prior to registration.

Contact department for information to register for this course.

EDHD498
Special Problems in Education

(Perm req)

Credits: 1-3 Grading Method: Regular,
 Pass-Fail, Audit

Available only to students who have definite plans for individual study of approved problems.

Contact department for information to register for this course.

EDHD498I
Special Problems in Education; Temperament and Personality in Childhood and Adolescence

(Perm req)

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Available only to students who have definite plans for individual study of approved problems.

0101	Kenneth Rubin	Seats (Total: 15)
	TBA	EDU 1108

EDHD617 Achievement Motivation in Adolescence

Credits: 3 Grading Method: Regular,
 Audit

Credit only granted for: EDHD779W or EDHD617. Formerly: EDHD779W.

Study of different aspects of motivation and how they develop in the secondary school years. Focus on how different instructional practices influence motivation and design of various strategies for improving students motivation.

Contact department for information to register for this course.

EDHD629 Seminar for the Center for Children, Relationships, and Culture

Credits: 1 Grading Method: Regular,
 Audit

A seminar and colloquia series featuring speakers from the department, the college, the university, and other universities and institutions from across the world that aims to cover issues pertaining to contemporary theory and research in human development.

0101	Melanie Killen	Seats (Total: 20)
	Meets August 26, 2019 - December 9, 2019	
	W 11:15am - 1:45pm	EDU 1107

EDHD662 Research Methods in Education Settings

Credits: 3 Grading Method: Regular,
 Audit

Research methods associated with studying the development, achievement, and school adjustment of children and adolescents in educational settings, with an emphasis on quantitative methodologies.

Contact department for information to register for this course.

EDHD690 Theoretical Foundations of Human Development

Credits: 3 Grading Method: Regular

Theoretical foundations in the field of human development with a focus on connections between the major theoretical paradigms in the literature and current research in developmental science.

0101	Natasha Cabrera	Seats (Total: 20)
	Tu 9:30am - 12:15pm	EDU 1107

EDHD711 Peer-Culture and Group Processes in Human Development

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of EDUC-Human Development and Quantitative Methodology department.

The process of group formation, role-taking and status-winning, and the emergence of the peer-culture during childhood and the evolution of the child society at different maturity levels to adulthood. The developmental tasks and adjustment problems associated with winning, belonging, and playing roles in the peer group.

0101	Kenneth Rubin	Seats (Total: 15)
	W 2:00pm - 4:45pm	EDU 1108

EDHD718 Apprenticeship in College Teaching; Apprenticeship in College Teaching

(Perm req)

Credits: 1 Grading Method: Regular

For graduate students teaching autonomously for the first, second, or third time at the University of Maryland, College Park; not intended for teaching assistants. This course provides graduate student teachers with a set of structured experiences that foster professional growth and development in the role of college instructor. Includes seminars on the scholarship of college teaching and principles of optimal college classroom environments, peer and faculty in-class observations of teaching, and guided reflective analysis of experience in the classroom.

0101	Jennie Lee-Kim	Seats (Total: 10)
	F 1:00pm - 3:30pm	EDU 3233

EDHD720 Social Development and Socialization Processes

Credits: 3 Grading Method: Regular,
Audit

This course covers social development and socialization processes across the life-span. The course typically covers the following topics: parent-child relationships, peer relationships, moral development, social cognition, social competence, social motivation, self-regulation, and cultural influences on development. This is core doctoral course.

0101	Melanie Killen	Seats (Total: 20)
	Tu 1:00pm - 3:45pm	EDU 2102

Cognitive Development and Learning: An Introduction

Introductory survey into contemporary theory and research in cognitive development; applications to classroom learning.

0101	Geetha Ramani	Seats (Total: 20)
	M 10:00am - 12:45pm	EDU 1107

Learning Theory and the Educative Process

Prerequisite: EDHD721; or permission of EDUC-Human Development and Quantitative Methodology department.

Advanced study of theories, issues and research in several categories of cognition and learning applied to education and the helping professions.

0101	Patricia Alexander	Seats (Total: 20)
	Tu 4:15pm - 7:00pm	EDU 3236

Internship in Human Development

Credits: 3-8 Grading Method: Regular,
Audit

Internship experience in one or more human service agencies in the community.

Contact department for information to register for this course.

Laboratory in Human Development

Credits: 1-6 Grading Method: Regular, Audit

Independent research supervised by an instructor in a research setting.

Limited to human development majors.

Contact department for information to register for this course.

Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Registration required to the extent of six hours for master's thesis.

Limited to human development majors.

Contact department for information to register for this course.

EDHD888 Apprenticeship in Human Development Research

(Perm req)

Credits: 1-8

Grading Method: Regular,
Audit

Apprenticeship in Human Development research.

Contact department for information to register for this course.

EDHD889 Practicum in Human Development

(Perm req)

Credits: 3-8

Grading Method: Regular,
Audit

Field experience in applied human development at a professional level of competence in a particular role with appropriate supervision.

Contact department for information to register for this course.

EDHD898 Pre-Candidacy Research

(Perm req)

Credits: 1-8

Grading Method: Regular

Contact department for information to register for this course.

EDHD899 Doctoral Dissertation Research

(Perm req)

Credits: 6

Grading Method: Regular

Registration required to 12-18 hours for a Ph.D. dissertation.

Limited to human development majors.

Contact department for information to register for this course.

**EDHI Education Leadership, Higher Ed
and International Ed**

Fall 2019

EDHI338B Teaching and Learning about Cultural Diversity through Intergroup Dialogue; Race, Gender, or Socioeconomic Status

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

General Education: DVCC

Engages students, from one or more cultural identity groups, in facilitated dialogue about the similarities and differences of experience that exist within a group and/or between and across groups. The goal of intergroup dialogue is for students to develop comfort with, and skill for, discourse on difficult topics toward the end of fostering positive, meaningful, and sustained cross-group relationships. Whereas in debate, students learn to listen to gain advantage, in intergroup dialogue, students learn to listen to gain understanding. In so doing, students develop increased multicultural interaction facility, heightened intergroup awareness and sensitivity, and greater commitment to civic engagement.

0101	Louisa Nkrumah, Kurubel Belay, Collin	Seats (Total: 42)
	Vernay, Jazmin Pichardo, Nana Brantuo,	
	Tiffany Harris, Elizabeth Sweeney	
	Meets August 26, 2019 - October 8, 2019	
	Tu 6:30pm - 8:30pm	Location: TBA

EDHI338D

Teaching and Learning about Cultural Diversity through Intergroup Dialogue; Sexual Identity, Religion and Spirituality, or Size and Appearance

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

General Education: DVCC

Engages students, from one or more cultural identity groups, in facilitated dialogue about the similarities and differences of experience that exist within a group and/or between and across groups. The goal of intergroup dialogue is for students to develop comfort with, and skill for, discourse on difficult topics toward the end of fostering positive, meaningful, and sustained cross-group relationships. Whereas in debate, students learn to listen to gain advantage, in intergroup dialogue, students learn to listen to gain understanding. In so doing, students develop increased multicultural interaction facility, heightened intergroup awareness and sensitivity, and greater commitment to civic engagement.

Contact department for information to register for this course.

EDHI338I

Teaching and Learning about Cultural Diversity through Intergroup Dialogue; Religion and Spirituality; Size and Appearance

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

General Education: DVCC

Engages students, from one or more cultural identity groups, in facilitated dialogue about the similarities and differences of experience that exist within a group and/or between and across groups. The goal of intergroup dialogue is for students to develop comfort with, and skill for, discourse on difficult topics toward the end of fostering positive, meaningful, and sustained cross-group relationships. Whereas in debate, students learn to listen to gain advantage, in intergroup dialogue, students learn to listen to gain understanding. In so doing, students develop increased multicultural interaction facility, heightened intergroup awareness and sensitivity, and greater commitment to civic engagement.

0201	Leigh Dunewood, Collin Vernay, Jazmin	Seats (Total: 28)
	Pichardo, Craig Farmer, Timea Webster,	
	Judith Martinez, Elizabeth Sweeney	
	Meets October 15, 2019 - December 4, 2019	
	Tu 6:00pm - 8:00pm	Location: TBA

EDHI338L

Teaching and Learning about Cultural Diversity through Intergroup Dialogue; Race, Gender, or Immigration

Credits: 1 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

Engages students, from one or more cultural identity groups, in facilitated dialogue about the similarities and differences of experience that exist within a group and/or between and across groups. The goal of intergroup dialogue is for students to develop comfort with, and skill for, discourse on difficult topics toward the end of fostering positive, meaningful, and sustained cross-group relationships. Whereas in debate, students learn to listen to gain advantage, in intergroup dialogue, students learn to listen to gain understanding. In so doing, students develop increased multicultural interaction facility, heightened intergroup awareness and sensitivity, and greater commitment to civic engagement.

0201	Laura Widener, Nana Brantuo, Michelle	Seats (Total: 42)
	Strange, Jazmin Pichardo, Thomas Le,	
	Aaron Hood, Laura Bohorquez Garcia,	
	Tynesha McCullers, Kamrie Risku, Kiyah McDermid	
	Meets October 14, 2019 - December 6, 2019	
	W 6:30pm - 8:30pm	Location: TBA

EDHI338V

Teaching and Learning about Cultural Diversity through Intergroup Dialogue; Disability or Immigration

Credits: 1 Grading Method: Regular, Pass-Fail, Audit General Education: DVCC

Engages students, from one or more cultural identity groups, in facilitated dialogue about the similarities and differences of experience that exist within a group and/or between and across groups. The goal of intergroup dialogue is for students to develop comfort with, and skill for, discourse on difficult topics toward the end of fostering positive, meaningful, and sustained cross-group relationships. Whereas in debate, students learn to listen to gain advantage, in intergroup dialogue, students learn to listen to gain understanding. In so doing, students develop increased multicultural interaction facility, heightened intergroup awareness and sensitivity, and greater commitment to civic engagement.

Contact department for information to register for this course.

EDHI488C**Special Topics in Education Policy and Administration; World Religions and Their Implications for Education**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special and intensive treatment of current topics and issues in education policy and administration.

0101	Jing Lin	Seats (Total: 20)
	Th 4:15pm - 7:00pm	EDU 1315

EDHI488E**Special Topics in Education Policy and Administration; Ecological Ethics and Education**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special and intensive treatment of current topics and issues in education policy and administration.

0101	Jing Lin	Seats (Total: 20)
	W 4:15pm - 7:00pm	EDU 1315

EDHI489**Field Experiences in Education**

(Perm req)

Credits: 1-4 Grading Method: Regular,
Pass-Fail, Audit

Planned field experience in education-related activities. Credit not to be granted for experiences accrued prior to registration.

Contact department for information to register for this course.

EDHI498**Special Problems in Education**

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Available only to students who have definite plans for individual study of approved problems.

Contact department for information to register for this course.

EDHI605**Comparative Education**

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: EDHI605, EDPL605, or EDPS605. Formerly: EDPL605.

Analyzes and compares leading issues in education in various countries of the world, particularly as they relate to crucial problems in American education.

0101	Mark Ginsburg	Seats (Total: 20)
	M 4:15pm - 7:00pm	EDU 2101

EDHI606 Political Economy of Education in a Global Context

Credits: 3 Grading Method: Regular,
 Audit

Credit only granted for: EDHI606, EDPL606, or EDPS606. Formerly: EDPL606.

Examination of alternative economics perspectives and their implications for education policy and practice internationally, from local to global levels. The connection of education to issues of development, inequality, poverty, gender, and race will be discussed.

0101	Steven Klees	Seats (Total: 20)
	Tu 4:15pm - 7:00pm	EDU 2102

EDHI650 Professional Seminar in Higher and Adult Education

Credits: 3 Grading Method: Sat-Fail

Credit only granted for: EDHI650, EDPL650, or EDPS650. Formerly: EDPL650.

Introduction to higher and adult education as a field of study. Origins, current dimensions and problems, and emerging issues. Field trips to state and national capitols, and involvement in professional conferences.

0101	Sharon Fries-Britt	Seats (Total: 20)
	Th 4:15pm - 7:00pm	EDU 2102

EDHI652 Higher Education in American Society

Credits: 3 Grading Method: Regular,
 Audit

Credit only granted for: EDHI652, EDPL652, or EDPS652. Formerly: EDPL652.

Examines the concepts of academic freedom, corporate autonomy and institutional accountability with emphasis on twentieth century relationships between higher education and government in the United States.

0101	Alberto Cabrera Casillas	Seats (Total: 15)
	Tu 4:15pm - 7:00pm	JMZ 3203

EDHI665 College Access and Choice

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDHI665 or EDHI788L. Formerly: EDHI788L.

Examines the college-going process, how and why some students successfully navigate it, and what policies and programs can help students from disadvantaged or underrepresented backgrounds overcome barriers to college access and entry.

0101	Alberto Cabrera Casillas	Seats (Total: 15)
	M 4:15pm - 7:00pm	KN1 1105

EDHI672 Modes of Inquiry in Education Research

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDHI672, EDPL672, or EDPS672. Formerly: EDPL672.

*Introduction to modes of inquiry appropriate to research on issues and problems in education.
Examination of qualitative, quantitative and mixed research methods and designs with a focus on
related standards of quality.*

0101	Steven Klees	Seats (Total: 20)
	M 7:00pm - 9:45pm	EDU 3315

EDHI679 Master's Seminar

Credits: 3 Grading Method: Regular,
Audit

Directed study for master's degree students writing seminar papers.

Contact department for information to register for this course.

EDHI682 Ecological Ethics and Education

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: EDHI682 or EDHI788E. Formerly: EDHI788E.

An exploration of the paradigms, approaches, and ways of knowing offered through ecological ethics and environmental sustainability education.

0101	Jing Lin	Seats (Total: 20)
	W 4:15pm - 7:00pm	EDU 1315

EDHI683

World Religions and Their Implications for Education

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDHI683 or EDHI788C. Formerly: EDHI788C.

Students develop a basic understanding of world religions, looking at their origins, development, teachings, and primary figures. Students explore the roles, meaning, purpose that education plays in the various religions and examine their implications for education in the 21st century.

0101	Jing Lin	Seats (Total: 20)
	Th 4:15pm - 7:00pm	EDU 1315

EDHI689

Practicum In Educational Administration and Supervision

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Promotes skill development in managerial, leadership and supervisory areas. Practicum is based on results of diagnostic instruments and an individual professional development plan.

Contact department for information to register for this course.

EDHI755

Federal Policies in Post-Secondary Education

Credits: 3 Grading Method: Regular, Audit

Cross-listed with EDPS755. Credit only granted for: EDHI755, EDPL755, or EDPS755. Formerly: EDPL755.

Evolution of the federal role, its current scope and funding. Policy issues associated with federal student aid programs, research grants and social equity regulations.

0101	Marvin Titus	Seats (Total: 15)
	W 4:15pm - 7:00pm	EDU 2102

EDHI788M

Special Topics in Education Policy and Administration; Systems Innovation

Credits: 3 Grading Method: Regular, Audit

Special and intensive treatment of current topics and issues in education policy and administration.

Contact department for information to register for this course.

EDHI789

Doctoral Practicum in Administration and Supervision

Credits: 1-3 Grading Method: Sat-Fail

Experiential activities designed to enhance student skills. Based on Individual Professional Development Plan for each student.

Contact department for information to register for this course.

EDHI798 Special Problems in Education

(Perm req)

Credits: 1-6

Grading Method: Regular,
Audit

Master's, AGS, or doctoral candidates who desire to pursue special research problems under the direction of their advisors may register for credit under this number.

Contact department for information to register for this course.

EDHI799 Master's Thesis Research

Credits: 1-6

Grading Method: Regular

Contact department for information to register for this course.

EDHI888 Apprenticeship in Education

Credits: 1-8

Grading Method: Regular,
Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

0101	Sharon Fries-Britt	Seats (Total: 5)
Contact instructor or department for details.		
2701	Marvin Titus	Seats (Total: 2)
Contact instructor or department for details.		
3301	Nelly Stromquist	Seats (Total: 10)
Contact instructor or department for details.		
3501	Alberto Cabrera Casillas	Seats (Total: 5)
Contact instructor or department for details.		

EDHI889 Internship in Education

(Perm req)

Credits: 3-8

Grading Method: Regular,
Audit

Internship experiences at a professional level of competence in a particular role with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students advanced to candidacy for doctoral degree.

Contact department for information to register for this course.

EDHI895

Research Critique Seminar

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: EDHI895, EDPL895, or EDPS895. Formerly: EDPL895.

Critiques of research designs in preparation for the doctoral dissertation.

0101	Marvin Titus	Seats (Total: 10)
	M 7:00pm - 9:45pm	EDU 2101

EDHI898

Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

EDHI899

Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Registration required to the extent of 6-9 hours for an Ed.D. Project and 12-18 hours for a Ph.D. Dissertation.

Contact department for information to register for this course.

EDMS

**Measurement, Statistics, and
Evaluation**

Fall 2019

EDMS451

Introduction to Educational Statistics

Credits: 3 Grading Method: Regular,
Audit General Education: FSAR

Restriction: Sophomore standing or higher. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Introduction to statistical reasoning; location and dispersion measures; computer applications; regression and correlation; formation of hypotheses tests; t-test; one-way analysis of variance; analysis of contingency tables.

0101	Gregory Hancock	Seats (Total: 200)
	TuTh 2:00pm - 3:15pm	BRB 1101

EDMS610 Classroom Assessment and Evaluation

Credits: 3 Grading Method: Regular,
Audit

Develop the understandings and skills needed to validly, reliably, and accurately assess student learning and to provide focused leadership in the area of classroom assessment.

Contact department for information to register for this course.

EDMS623 Applied Measurement: Issues and Practices

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: EDMS410. And EDMS645; or students who have taken courses with comparable content may contact the department.

Measurement theory and its application at an intermediate level; test development, validation and interpretation; issues and recent developments in measurement.

0101	Hong Jiao	Seats (Total: 25)
	Th 4:15pm - 7:00pm	EDU 3315

EDMS645 Quantitative Research Methods I

Credits: 3 Grading Method: Regular,
Audit

Research design and statistical applications in educational research: data representation; descriptive statistics; estimation and hypothesis testing. Application of statistical computer packages is emphasized.

0101	Alice Donlan	Seats (Total: 30)
	W 4:15pm - 7:00pm	EDU 2121

EDMS646 General Linear Models I

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: EDMS645; or an equivalent introductory statistics course.

A first post-introductory inferential statistics course, with emphasis on analysis of variance procedures and designs from within the general linear modeling framework. Assignments include student analysis of education and related data; application of statistical software packages is emphasized.

0101	Jeffrey Harring	Seats (Total: 30)
	Tu 4:15pm - 7:00pm	EDU 1121

EDMS651 General Linear Models II

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: EDMS646; or students who have taken courses with comparable content may contact the department.

Multiple regression and correlation analysis; trend analysis; hierarchical and stepwise procedures; logistic regression; software for regression analysis.

0101	Jeffrey Harring	Seats (Total: 30)
	W 4:15pm - 7:00pm	EDU 0306

EDMS655 Introduction to Multilevel Modeling

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: EDMS651; or students who have taken courses with comparable content may contact the department.

Introduction to multilevel models and methodology as strategies for modeling change and organizational effects.

0101	Tracy Sweet	Seats (Total: 20)
	W 4:15pm - 7:00pm	EDU 2101

EDMS657 Exploratory Latent and Composite Variable Methods

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: EDMS651.

Development of models for exploratory factor analysis and their practical applications. Additional topics will draw from latent class analysis, cluster analysis, mixture models, canonical correlation, multidimensional scaling, and configural frequency analysis.

0101	Gregory Hancock	Seats (Total: 30)
	Tu 4:15pm - 7:00pm	EDU 0220

EDMS738G Seminar in Special Problems in Measurement; Assessment and Evaluation for School Leaders: Part II

Credits: 3 Grading Method: Regular,
Audit

An opportunity for students with special interests to focus in depth on contemporary topics in measurement. Topics to be announced, but will typically be related to applied and theoretical measurement.

Contact department for information to register for this course.

EDMS738R Seminar in Special Problems in Measurement; Diagnostics for Item Response Models

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

An opportunity for students with special interests to focus in depth on contemporary topics in measurement. Topics to be announced, but will typically be related to applied and theoretical measurement.

0101	Yang Liu	Seats (Total: 20)
	M 4:15pm - 7:00pm	EDU 3233

EDMS769G Special Topics in Applied Statistics in Education; Graphical Models for Causal Inference

Credits: 3 Grading Method: Regular,
Audit

Designed primarily for students majoring or minoring in measurement, statistics or evaluation.

0101	Peter Steiner	Seats (Total: 20)
	Th 4:15pm - 7:00pm	ASY 3221
<i>Prerequisite: EDMS779. Focus is placed on the theory and application of directed acyclic graphs and structural causal models. Begins with a general introduction and then discusses confounding, collider variables, d-separation, causal identification, counterfactual analysis, and causal mediation analysis.</i>		

EDMS798 Special Problems in Education

(Perm req)

Credits: 1-6 Grading Method: Regular,
Audit

Master's, EDMS majors, or doctoral candidates who desire to pursue special research problems under the direction of their advisors may register for credit under this number.

Prerequisite: permission of department.

Contact department for information to register for this course.

EDMS799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Registration required to the extent of 6 credits.

Contact department for information to register for this course.

EDMS889 Internship in Measurement and Statistics

Credits: 3-8 Grading Method: Regular,
Audit

Provides internship experiences at a professional level of competence in a particular role with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students advanced to candidacy for doctoral degree.

Contact department for information to register for this course.

EDMS898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

EDMS899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Registration required to the extent of 12 credits.

Contact department for information to register for this course.

EDSP Education, Special

Fall 2019

EDSP210 Introduction to Special Education

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

General Education: DVUP

Restriction: Sophomore standing or lower. Credit only granted for: EDSP210 or EDSP470.

Characteristics and needs of individuals receiving special education and related services. Current issues and practices in special education.

0101	Katryna Andrusik TuTh 5:00pm - 6:15pm	Seats (Total: 10) ASY 2309
0301	Cameron Butler MW 12:30pm - 1:45pm	Seats (Total: 10) KEY 0103

EDSP211

Introduction to Special Education

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DVUP

Restriction: Sophomore standing or lower; and permission of EDUC-Counseling, Higher Education and Special Education department. Credit only granted for: EDSP210 or EDSP470.

An introduction to the field of special education. Students examine historical foundations, including legislation; review components necessary for effective service delivery; and develop an understanding of the role of collaboration and consultation with parents, school personnel and other professionals. In addition, students are introduced to the nature and characteristics of various disabilities and review current issues in the field including overrepresentation of minority students in special education, inclusion, and federal and state assessment mandates. Current topics are addressed including evidence-based practices, universal design for learning, and individualization and differentiation of instruction..

0101	Joan Lieber M 1:00pm - 3:45pm	Seats (Total: 22) EDU 2101
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EDSP220

Disability in Community: Access, Accommodation, and Adaptation

Credits: 3

Grading Method: Regular

General Education: DSSP,
DVCC

Examines the concept of disability in a variety of community settings. Drawing on classic and contemporary readings in psychology, sociology and special education, the course will couple conceptual and historical understanding of disability with first-hand service-learning experiences in the community. Students will develop a plan in several phases that encompasses principles of Universal Design for Living/Learning (UDL) to study and participate in community-based activities.

0101	Carolyn Fink Class time/details on ELMs	Seats (Total: 15) ONLINE
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EDSP289I

Disability: From Stigma and Sideshow to Mainstream and Main Street

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: SB, D

General Education: DSHS,
DVUP, SCIS

0101	Peter Leone	Seats (Total: 60)
	TuTh 9:30am - 10:45am	ESJ 0215

EDSP321 **The Young Child As Scientist**

Credits: 3 Grading Method: Regular

Prerequisite: EDSP423, EDHD431, and EDSP315; and track 1: Must have completed EDSP430 and EDSP433; OR Track 2: Must have completed EDHD415 and EDHD424. Corequisite: EDHD322, EDHD323, EDSP417, EDHD441, EDHD442, EDHD443, and EDHD444.

A theoretical and pedagogical framework for evidence-based inclusive science instruction in inclusive early childhood classrooms. Examination of principles of inquiry-based science learning and develop strategies for helping children acquire fundamental problem-solving skills that may be applied to understanding a wide array of science content. Assessment strategies for evaluating the achievement of science objectives, and the achievement for all children will be addressed. Includes field experience.

0101	Joan Lieber	Seats (Total: 28)
	W 8:00am - 10:30am	EDU 1107

EDSP376 **Fundamentals of Sign Language**

Credits: 3 Grading Method: Regular, General Education: DVCC
 Pass-Fail, Audit

Receptive and expressive skills in American Sign Language. Examination of the causes of deafness, characteristics of deaf education, and aspects of the culture of the deaf community.

0101	Michael Dunham	Seats (Total: 30)
	MW 5:00pm - 6:15pm	TYD 0111

EDSP400 **Instruction of Students with Severe Disabilities I**

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be in Special Education program. Jointly offered with EDSP602. Credit only granted for: EDSP400 or EDSP602.

Functional assessment procedures and instructional methods for students with severe disabilities.

0101	Frances Kohl	Seats (Total: 40)
	W 4:15pm - 6:15pm	EDU 1107
	Tu 9:00am - 11:00am	Location: TBA Lab

EDSP401**Teaching Students with Disabilities in Elementary Classrooms**

(Perm req)

Credits: 3

Grading Method: Regular

Restriction: Permission of EDUC-Special Education department. Credit only granted for: EDSP401 or EDSP499F. Formerly: EDSP499F.

This course is designed for elementary education majors to prepare for teaching students with disabilities in elementary classrooms. The course examines the legal requirements for general education teachers in the public schools including best practices for participating in the Individual Education Program (IEP) team process, and understanding Response to Intervention (RTI) as a approach to the early identification and support of students with learning and behavior needs. Information is provided on the characteristics of students who have been identified as having high incidence disabilities (e.g., learning disabilities, attention deficit hyperactivity disorder, speech and language delays, emotional or behavioral disorders, and other health impairments). The course then provides information on universal design (UDL) principles for learning, instructional suggestions to include students with disabilities in the general classroom, co-teaching and methods for integrating technology and assistive technology to benefit all students.

0101	Susan De La Paz	Seats (Total: 25)	
	M 4:15pm - 5:30pm	ASY 1213	
	Th 11:00am - 12:15pm	PHY 1204	Discussion
0102	Susan De La Paz	Seats (Total: 25)	
	M 4:15pm - 5:30pm	ASY 1213	
	Tu 11:00am - 12:15pm	PHY 1204	Discussion
0103	Susan De La Paz	Seats (Total: 25)	
	M 4:15pm - 5:30pm	ASY 1213	
	W 10:00am - 11:15am	KNI 1105	Discussion

EDSP404**Education of Students with Autism Spectrum Disorders**

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department. Jointly offered with EDSP604. Credit only granted for: EDSP404 or EDSP604.

Characteristics, needs, assessment, and educational methods for students with autism spectrum disorders.

0101	Gulnoza Yakubova	Seats (Total: 40)	
	W 4:15pm - 7:00pm	EDU 1121	

EDSP411 Universal Design for Learning

(Perm req)

Credits: 3 Grading Method: Regular

*Prerequisite: EDSP210 or EDSP470. Restriction: Must be in Special Education program.**Universal Design for Learning addresses a foundation framework for teacher candidates to learn how to design and implement instruction for a broad range of students with diverse needs rather than rely exclusively on accommodations to instruction for some students.*

0101	Yewon Lee	Seats (Total: 24)
	Th 1:15pm - 4:00pm	EDU 3236
	Class time/details on ELMs	ONLINE

EDSP413 Behavior and Classroom Management in Special EducationCredits: 3 Grading Method: Regular,
Audit*Restriction: Must be in Special Education program. Jointly offered with EDSP613. Credit only granted for: EDSP413, or EDSP613.**Use of applied behavior analysis for assessment of behavior and learning environments. Design of behavior and classroom management of students in special education.*

0101	Kelli Cummings	Seats (Total: 40)
	Tu 4:15pm - 7:00pm	EDU 2119

EDSP417 Reading Diagnosis and Assessment

Credits: 3 Grading Method: Regular

*Prerequisite: EDSP423, EDHD431, and EDSP315; and track 1: Must have completed EDSP430 and EDSP433; OR Track 2: Must have completed EDHD415 and EDHD424. Corequisite: EDHD322, EDHD323, EDSP321, EDHD441, EDHD442, EDHD443, and EDHD444.**Reading Diagnosis and Assessment prepares teacher candidates to assess children in general and special early childhood education settings in the areas of reading and writing in order to plan for instruction. The course will focus on diagnostic, screening, progress monitoring, and outcome assessments in early and beginning literacy. The course is designed to provide participants with the knowledge and skills necessary to collect and use a wide range of assessment data in general education and special education settings. Includes field experience.*

0101	Kelli Cummings	Seats (Total: 28)
	M 1:00pm - 3:45pm	EDU 1315

EDSP420**Child Development, Birth to Three Years**

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: EDHD210 and EDHD220. Corequisite: EDHD425 and EDHD314. Restriction: Must be in Special Education program. Cross-listed with ED HD434. Credit only granted for: EDHD419A, EDSP420 or EDHD434.

Child development theory and research, as well as knowledge about typical and atypical development of children from birth to three years of age. The course emphasizes learning for children with and without disabilities, and for children who are at risk due to poverty and other environmental factors. The course will introduce how children develop and the challenges they face within the domains of physical, cognitive, language, social, and emotional development, with particular attention paid to the impact of risk factors on development. Students will become familiar with delays and differences in development that may occur as the result of disability. Finally, students will learn the effects of cultural and linguistic differences on growth and development. Information about theory and research in child development for children with and without disabilities will be enhanced through a series of observational experiences, which will build upon concepts addressed during class. Includes field experiences.

0101	Deirdre Barnwell	Seats (Total: 36)
	Th 4:15pm - 7:00pm	JMP 1202

EDSP443**Language and Literacy Acquisition in Children with Disabilities**

Credits: 3 Grading Method: Regular

Restriction: Must be in Special Education program. Additional information: This course is the first of four reading courses required by the Maryland State Department of Education for teacher certification in Special Education.

Language and literacy acquisition and characteristics of typical and atypical language development in supporting students with reading and writing disabilities.

0101	Nicole Abera	Seats (Total: 40)
	W 1:15pm - 4:00pm	EDU 1121

EDSP451**Curriculum and Instruction: Elementary/Middle Special Education**

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be in Special Education program. Jointly offered with EDSP652. Credit only granted for: EDSP451 or EDSP652.

Methods for instruction of students with disabilities in the general education curriculum. Collaboration with other professionals is included.

0101	Dawn Martin	Seats (Total: 40)
	M 1:15pm - 3:15pm	EDU 1107
	Th 9:00am - 11:00am	Location: TBA Lab

EDSP452 Internship I: Elementary/Middle Special Education

Credits: 2-4 Grading Method: Regular, General Education: DSSP
 Audit

Restriction: Must be in Special Education program. Jointly offered with EDSP692. Credit only granted for: EDSP452 or EDSP692.

Field experience in elementary/middle school special education.

0101	Stacey Williams	Seats (Total: 20)
	F 10:30am - 12:00pm	EDU 3315
	MTuWTh 8:00am - 1:00pm	Location: TBA Lab

EDSP470 Introduction to Special Education

Credits: 3 Grading Method: Regular, General Education: DVUP
 Audit

Restriction: Must not have completed EDSP210. Credit only granted for: EDSP210 or EDSP470.

Designed to give an understanding of the needs of all types of exceptional children.

0101	Katryna Andrusik	Seats (Total: 42)
	TuTh 5:00pm - 6:15pm	ASY 2309
0301	Cameron Butler	Seats (Total: 38)
	MW 12:30pm - 1:45pm	KEY 0103

EDSP484 Reading and Writing Instruction in Special Education II

Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDSP416. Restriction: Must be in Special Education program. Jointly offered with EDSP684. Credit only granted for: EDSP484 or EDSP684.

Focus on the development of reading and writing programs for students in special education. Builds on foundations established in EDSP416.

0101	Jade Wexler	Seats (Total: 40)
	Tu 1:15pm - 3:45pm	ASY 3217

EDSP487 Family Partnerships in Special Education

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in Special Education program. Jointly offered with EDSP687. Credit only granted for: EDSP487 or EDSP687.

Strategies for communicating and working with families of students with disabilities.

0101	Wanda Pittman-Gregory	Seats (Total: 40)
	M 4:15pm - 7:00pm	EDU 1107

EDSP498 Special Problems in Special Education

(Perm req)

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Available only to education majors who have definite plans for individual study of approved problems. Credit according to extent of work.

Special education majors only.

Contact department for information to register for this course.

EDSP498B Special Problems in Special Education; Career Development and Advising

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Available only to education majors who have definite plans for individual study of approved problems. Credit according to extent of work.

0101	Glenn Kasten-Sportes, Jessica Chew	Seats (Total: 15)
	F 9:00am - 9:50am	EDU 1107
	Contact instructor or department for details.	
0201	Glenn Kasten-Sportes, Jessica Chew	Seats (Total: 5)
	Contact instructor or department for details.	
	Contact instructor or department for details.	

EDSP499 Workshops, Clinics, and Institutes in Special Education

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

The following type of educational enterprise may be scheduled under this course heading: workshops conducted by the special education department (or developed cooperatively with other departments, colleges and universities) and not otherwise covered in the present course listing. Laboratories, and special education centers; institutes developed around specific topics or problems and intended for designated groups such as school superintendents, principals and supervisors.

0901	Peter Leone	Seats (Total: 5)
Contact instructor or department for details.		

EDSP600 Issues and Trends in Educating Individuals with Disabilities

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: 9 credits in EDSP courses. Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department.

Examines research and practice relevant to the education of individuals with disabilities.

Contact department for information to register for this course.

EDSP602 Instruction of Students with Severe Disabilities I

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in Special Education (Master's) program. Credit only granted for: EDSP400 or EDSP602.

Functional assessment procedures and instructional methods for students with severe disabilities.

0101	Frances Kohl	Seats (Total: 40)
	W 4:15pm - 6:15pm	EDU 1107
	Tu 9:00am - 11:00am	Location: TBA Lab

EDSP604 Education of Students with Autism Spectrum Disorder

(Perm req) Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department. Jointly offered with EDSP404. Credit only granted for: EDSP404 or EDSP604.

Characteristics, needs, assessment, and educational methods for students diagnosed as autistic or having a pervasive development disorder.

0101	Gulnoza Yakubova	Seats (Total: 40)
	W 4:15pm - 7:00pm	EDU 1121

EDSP609 Embracing Diversity: Teaching Students with Disabilities and Gifted Learners in Secondary

Credits: 3 Grading Method: Regular

This course is designed for secondary education majors to prepare for teaching students with disabilities in secondary classrooms. The course examines the legal requirements for general education teachers in the public schools including best practices for participating in the Individual Education Program (IEP) team process, and understanding Response to Intervention (RTI) as a approach to the early identification and support of students with learning and behavior needs. Information is provided on the characteristics of students who have been identified as having high incidence disabilities (e.g., learning disabilities, attention deficit hyperactivity disorder, speech and language delays, emotional or behavioral disorders, and other health impairments). Information is also provided on the characteristics of students who are considered gifted and/or talented, as well as instructional methods for differentiating instruction to meet their needs. The course then provides information on universal design (UDL) principles for learning, instructional suggestions to include students with disabilities in the general classroom, co-teaching, and methods for integrating technology and assistive technology to benefit all students.

Contact department for information to register for this course.

EDSP613 Behavior and Classroom Management in Special Education

Credits: 3 Grading Method: Regular

Restriction: Must be in Special Education (Doctoral) program; or must be in Special Education (Master's) program; or permission of instructor. Jointly offered with EDSP413. Credit only granted for: EDSP413 or EDSP613.

Applied behavior analysis for assessment of behavior and learning environments. Behavior and classroom management strategies for students in special education.

0101	Kelli Cummings	Seats (Total: 40)
	Tu 4:15pm - 7:00pm	EDU 2119

EDSP615 Evaluation and Measurement of Exceptional Children and Youth

Credits: 1-3 Grading Method: Regular,
Audit

Prerequisite: EDSP600 and EDMS646; or permission of EDUC-Counseling, Higher Education and Special Education department. Jointly offered with EDSP415. Credit only granted for: EDSP415 or EDSP615.

Deals with the understanding and interpretation of the results of psychological and educational tests applicable for use with exceptional children and youth.

PLT1	Leslie Page-Voth	Seats (Total: 25)
	Class time/details on ELMs	ONLINE
<i>Students in the Graduate Certificate in "Special Education for General Education Teachers in Inclusive Classrooms" may enroll without permission. All other graduate students must contact oes@umd.edu to determine registration eligibility.</i>		

EDSP625 Seminar on Severely Handicapping Conditions

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department.

Research and theories relevant to the education of severely handicapped individuals.

0101	Frances Kohl	Seats (Total: 15)
	M 4:15pm - 7:00pm	EDU 3236

EDSP652 Curriculum and Instruction: Elementary Special Education

Credits: 3 Grading Method: Regular,
Audit

Jointly offered with EDSP451. Credit only granted for: EDSP451 or EDSP652.

Methods for instruction of students with disabilities in the general education curriculum. Collaboration with other professionals is included.

For EDSP majors only.

0101	Dawn Martin	Seats (Total: 40)
	M 1:15pm - 3:15pm	EDU 1107
	Th 9:00am - 11:00am	Location: TBA Lab

EDSP671 Qualitative Methodologies in Special Education

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: EDSP600. Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department.

Design and evaluation of qualitative research in special education across disabilities and ages.

0101	Paula Beckman	Seats (Total: 15)
	W 4:15pm - 7:00pm	KNI 1105
	Class time/details on ELMs	ONLINE

EDSP684 Reading and Writing Instruction in Special Education II

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: EDSP616. Restriction: Permission of EDUC-Counseling, Higher Education and Special Education department. Jointly offered with EDSP484. Credit only granted for: EDSP484 or EDSP684.

Development of effective reading and writing programs for students receiving special education services. Builds on the foundation established in EDSP 616.

0101	Jade Wexler	Seats (Total: 40)
	Tu 1:15pm - 3:45pm	ASY 3217

EDSP687 Family Partnerships in Special Education

Credits: 3 Grading Method: Regular

Restriction: Must be in Special Education (Doctoral) program; or must be in Special Education (Master's) program. Jointly offered with EDSP487. Credit only granted for: EDSP487 or EDSP687.

Strategies for communicating and working with families of students with disabilities.

0101	Wanda Pittman-Gregory	Seats (Total: 40)
	M 4:15pm - 7:00pm	EDU 1107

EDSP692 Graduate Internship I: Elementary/Middle Special Education

Credits: 2-4 Grading Method: Regular,
Audit

Restriction: Must be in Special Education (Master's) program. Credit only granted for: EDSP452 or EDSP692.

Field experience in elementary/middle school special education.

0101	Stacey Williams	Seats (Total: 5)
	F 10:30am - 12:00pm	EDU 3315
	MTuWTh 8:00am - 1:00pm	Location: TBA Lab

EDSP798 Special Problems in Special Education

(Perm req)

Credits: 1-6 Grading Method: Regular,
Audit

Intended for Master's, AGS, or doctoral students in education who desire to pursue a research problem.

Special education majors only.

Contact department for information to register for this course.

EDSP798E

Special Problems in Special Education; Families Course Project

Credits: 1 Grading Method: Regular,
Audit

Intended for Master's, AGS, or doctoral students in education who desire to pursue a research problem.

Contact department for information to register for this course.

EDSP799

Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Registration required to the extent of six hours for Master's thesis.

Special education majors only.

Contact department for information to register for this course.

EDSP875

Policy Issues Affecting Individuals with Disabilities

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of instructor; or must be in Special Education (Doctoral) program; or must be in Special Education (Master's) program.

An analysis of current educational and disability issues and policies pertaining to children, youth, and adults with disabilities.

0101	Philip Burke	Seats (Total: 25)
	Th 4:15pm - 7:00pm	Location: TBA

EDSP888

Apprenticeship in Special Education

(Perm req)

Credits: 1-8 Grading Method: Regular,
Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate- seeking graduate students.

Contact department for information to register for this course.

EDSP888A Apprenticeship in Special Education; Apprenticeship in College Teaching

Credits: 3 Grading Method: Regular

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate- seeking graduate students.

Contact department for information to register for this course.

EDSP889 Internship in Special Education

(Perm req) Credits: 3-8 Grading Method: Regular, Audit

Internship experiences at a professional level of competence in a particular role with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students advanced to candidacy for doctoral degree.

Special education majors only.

Contact department for information to register for this course.

EDSP898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

EDSP899 Doctoral Dissertation Research

(Perm req) Credits: 6 Grading Method: Regular

Registration required to the extent of 6-9 hours for an Ed.D. Project and 12-18 hours for a Ph.D. dissertation.

Special education majors only.

Contact department for information to register for this course.

EDUC	Education	Fall 2019
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EDUC388 Special Topics in Education; Guided Experience In College Teaching

(Perm req) Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

0401	Sharon Vanwright	Seats (Total: 20)
	Contact instructor or department for details.	
	Contact instructor or department for details.	
	<i>Relates to the academic achievement program and should be taken concurrently with EDCI498, section 6601.</i>	
SG91	Annie Foster Ahmed, Mary Gallagher	Seats (Total: 12)
	W 3:30pm - 5:00pm	Location: TBA
	Contact instructor or department for details.	
	<i>Restricted to students in the Guided Study Sessions (GSS program at the Universities at Shady Grove). Prerequisite: Permission of the Associate Director of the Center for Academic Success (CAS) at USG.</i>	

EDUC388E Special Topics in Education; Controversial Issues in Education Reform

Credits: 3 Grading Method: Regular, General Education: DSSP
 Pass-Fail, Audit

Cross-listed with PLCY388E. Credit granted for EDUC388E or PLCY388E.

0101	John King	Seats (Total: 30)
	M 4:30pm - 7:15pm	ASY 3215

EDUC388T Special Topics in Education; Guided Experience in College Teaching - UTA

(Perm req)

Credits: 3 Grading Method: Regular, General Education: DSSP
 Pass-Fail, Audit

0101	Jessica Haddaway	Seats (Total: 30)
	M 5:00pm - 7:00pm	JMZ 0205
	Class time/details on ELMs	ONLINE Discussion

EDUC388U Special Topics in Education; New Student Programs

(Perm req)

Credits: 3 Grading Method: Regular, General Education: DSSP
 Pass-Fail, Audit

0201	Allison Gibeily, Matthew Hicks	Seats (Total: 20)
	M 5:00pm - 7:00pm	TWS 1313
	Contact instructor or department for details.	
	<i>Restricted to students who are teaching UNIV100 or UNIV101.</i>	

0202	Gerry Strumpf	Seats (Total: 20)
	Tu 4:00pm - 6:00pm	COL 1102
	Contact instructor or department for details.	
	<i>Restricted to students who are teaching UNIV100 or UNIV101.</i>	
0501	Stacia Woycheck, Kasey Ezzat	Seats (Total: 20)
	M 2:00pm - 4:00pm	SYM 3121
	Contact instructor or department for details.	

EDUC498
Selected Topics in Education

(Perm req)

Credits: 1-3 Grading Method: Regular

Current topics and issues in education.

0101	Jessica Haddaway	Seats (Total: 30)
	Contact instructor or department for details.	

EDUC640
Introduction to Educational Leadership

 Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: EDHI640 or EDUC640. Formerly: EDHI640.
The focus of this course is the analysis of the role of education administrators/leaders in the social, political, and legal contexts of schools. Also examines the role of leadership in school improvement.
Contact department for information to register for this course.

EDUC646
Leading Instructional Excellence

 Credits: 3 Grading Method: Regular,
Audit

Prerequisite: EDUC645; or permission of instructor. Credit only granted for: EDHI646 or EDUC646. Formerly: EDHI646.
Leader's role in fostering high quality teaching and learning. Exploration of the relationship between curriculum instruction assessment and the organizational structure of K-12 public schooling. Development and assessment of frameworks for understanding instructional quality. Analysis of strategies for supporting teachers as they engage in curricular and professional development. Consideration of factors involved in creating and sustaining instructionally centered schools.
Contact department for information to register for this course.

EDUC670
Learning Communities

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDHI670 or EDUC670. Formerly: EDHI670.

Reviews contemporary research on student and teacher learning and schools as learning organizations. It aims to build students understanding of opportunities and challenges to implementing learning environments in various educational organizations. Readings, cases and assignments emphasize students' understanding of learning theories and their application to various organizational settings.

Contact department for information to register for this course.

EDUC702 Applied Research Design for Education Leaders

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of EDUC-College of Education. Credit only granted for: EDUC702 or EDHI702. Formerly: EDHI 702.

Emphasizes quantitative and qualitative methodologies to investigate a range of educational problems. Designed for EdD doctoral students.

Contact department for information to register for this course.

EDUC703 Conducting Library Research for Dissertations

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Restriction: Permission of EDUC-College of Education; and must be enrolled in EdD in School System Leadership.

Course is designed to provide students in the Ed.D. doctoral program in School System Leadership with the skills necessary to conduct library research in preparation for developing the literature review for the Capstone.

Contact department for information to register for this course.

EDUC704 Introduction to Writing the Dissertation in Practice

Credits: 2 Grading Method: Regular, Audit

Restriction: Permission of EDUC-College of Education and Must be in EdD School System Leadership program.

This course is designed to provide students in the Ed.D. program with specific strategies and skills needed to complete their Dissertation of Practice. Skills include constructing a problem statement and developing a cohesive argument for a proposed solution.

Contact department for information to register for this course.

EDUC740**Managing Educational Organizations in a Diverse Society**

Credits: 4

Grading Method: Regular,
Audit

Restriction: Permission of EDUC-College of Education. Credit only granted for: EDUC740 or EDHI740. Formerly: EDHI740.

Contemporary social and cultural influences that impact on the management of schools and school systems in a diverse society. The effects on schools and school systems of changes in the economy, family structure, demographics and technology will be examined.

Contact department for information to register for this course.

EDUC760**The Human Dimension in Administration**

Credits: 4

Grading Method: Regular,
Audit

Restriction: Permission of EDUC-College of Education. Credit only granted for: EDUC760 or EDHI760. Formerly: EDHI760.

Course focuses on theory, research findings, and current practices in managing human resources in educational organizations. Issues related to performance evaluations, professional development, and legal and ethical standards are addressed.

Contact department for information to register for this course.

EDUC767**Seminar on School District Leadership**

Credits: 4

Grading Method: Regular,
Audit

Restriction: Permission of EDUC-College of Education. Credit only granted for: EDUC767 or EDHI767. Formerly: EDHI767.

Examination of theory and research related to school district leadership with focus on improvement sciences. Course uses improvement science model to understand organizational, political, community, instructional problems of practice.

Contact department for information to register for this course.

EDUC888**Applied Apprenticeship in Education**

Credits: 1-3

Grading Method: Regular,
Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals.

Contact department for information to register for this course.

EDUC888E Applied Apprenticeship in Education; Improvement Science

Credits: 1 Grading Method: Regular,
 Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals.

Contact department for information to register for this course.

EDUC888L Applied Apprenticeship in Education; Introduction to Library Research

Credits: 2 Grading Method: Regular,
 Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals.

Contact department for information to register for this course.

EDUC888W Applied Apprenticeship in Education; Introduction to Scholarly Writing

Credits: 2 Grading Method: Regular,
 Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals.

Contact department for information to register for this course.

EDUC898 Pre-Candidacy Research

Credits: 2-4 Grading Method: Regular

Pre-Candidacy Research

Contact department for information to register for this course.

EDUC899 Dissertation of Practice Research

(Perm req) Credits: 1-6 Grading Method: Regular,
 Audit

Registration required to the extent of 6-9 hours for an Ed.D. Dissertation.

PGCPS II EdD Outreach Program. Registration restricted to program.

Contact department for information to register for this course.

ENAE Engineering, Aerospace

Fall 2019

ENAE100 The Aerospace Engineering Profession

(Perm req)

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

Recommended: ENES100 and MATH140.

Overview of salient aspects of professional practice of Aerospace Engineering. Introduction to the range of technical expertise needed to succeed in the profession and the objectives of the various parts of the Aerospace Engineering program at UMCP in supporting students' efforts in gaining the required knowledge and skills. Familiarization with departmental faculty and their areas of research, creation of links with other students, professional society student chapters, and available resources. Discussion of ethical issues, business requirements, and their interactions with technical developments.

0101	Norman Wereley Tu 12:30pm - 1:45pm M 2:00pm - 2:50pm	Seats (Total: 30) EGR 1202 MTH 0403	Discussion
0102	Norman Wereley Tu 12:30pm - 1:45pm M 4:00pm - 4:50pm	Seats (Total: 30) EGR 1202 MTH 0401	Discussion
0103	Norman Wereley Tu 12:30pm - 1:45pm Tu 11:00am - 11:50am	Seats (Total: 30) EGR 1202 JMP 1109	Discussion
0104	Norman Wereley Tu 12:30pm - 1:45pm W 2:00pm - 2:50pm	Seats (Total: 30) EGR 1202 BPS 0283	Discussion
0105	Norman Wereley Tu 12:30pm - 1:45pm W 4:00pm - 4:50pm	Seats (Total: 30) EGR 1202 MTH 0401	Discussion

ENAE202

Computing Fundamentals for Engineers

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Corequisite: Must be concurrently enrolled in MATH141. Restriction: Permission of ENGR-Aerospace Engineering department. Credit only granted for: ENAE202 or ENME202.

Introduction to computational tools for the solution of engineering problems. C++ & MATLAB programming including branching and loops, functions, file handling, arrays, and data structures. Students will be introduced to object-oriented programming, basic computing, algorithms, and principles of software engineering.

0104	Abhijit Dasgupta	Seats (Total: 23)	
	MW 11:00am - 11:50am	BRB 1101	
	W 2:00pm - 3:50pm	EGR 0312	Lab

ENAE283 Introduction to Aerospace Systems

Credits: 3 Grading Method: Regular

Prerequisite: PHYS161, MATH141, and ENES102. Corequisite: PHYS261 and PHYS260. Restriction: Must be in Engineering: Aerospace program. Credit only granted for: (ENAE281 and ENAE282) or ENAE283. Formerly: ENAE281 and ENAE282.

Introduction to airplanes and space vehicles as aerospace systems. Fundamentals that describe these systems. Elements of aerodynamics, airfoils and wings. Airplane performance, stability and control. Aircraft and rocket propulsion. Fundamentals of orbital motion. Aspects of vehicle conceptual design.

0101	Mary Bowden	Seats (Total: 70)
	TuTh 9:30am - 10:45am	ATL 2324
0102	Andrew Becnel	Seats (Total: 70)
	TuTh 9:30am - 10:45am	MCB 1207

ENAE283H Introduction to Aerospace Systems

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: PHYS161, MATH141, and ENES102. Corequisite: PHYS261 and PHYS260. Restriction: Must be in Engineering: Aerospace program. Credit only granted for: (ENAE281 and ENAE282) or ENAE283. Formerly: ENAE281 and ENAE282.

Introduction to airplanes and space vehicles as aerospace systems. Fundamentals that describe these systems. Elements of aerodynamics, airfoils and wings. Airplane performance, stability and control. Aircraft and rocket propulsion. Fundamentals of orbital motion. Aspects of vehicle conceptual design.

0101	Alison Flatau	Seats (Total: 35)
	TuTh 9:30am - 10:45am	EGR 1104

ENAE301 Dynamics of Aerospace Systems

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS271, MATH461, PHYS270, MATH246, ENAE283, ENAE202, ENES102, and MATH241. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Kinematics and dynamics of three dimensional motion of point masses and rigid bodies with introduction to more general systems. Primary emphasis on Newtonian methods. Practice in numerical solutions and computer animation of equations of motion using MATLAB.

0101	Derek Paley TuTh 12:30pm - 1:45pm F 1:00pm - 1:50pm	Seats (Total: 43) MMH 1400 CHM 1224	Lab
0102	Derek Paley TuTh 12:30pm - 1:45pm F 2:00pm - 2:50pm	Seats (Total: 43) MMH 1400 CHM 1224	Lab
0103	Derek Paley TuTh 12:30pm - 1:45pm F 3:00pm - 3:50pm	Seats (Total: 43) MMH 1400 CHM 1224	Lab
0104	Derek Paley TuTh 12:30pm - 1:45pm F 4:00pm - 4:50pm	Seats (Total: 43) MMH 1400 CHM 1224	Lab

ENAE311

Aerodynamics I

Credits: 3 Grading Method: Regular

Prerequisite: PHYS271, MATH461, PHYS270, MATH246, ENAE283, ENES220, ENAE202, MATH241, and ENES232. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department. And junior standing or higher.

Fundamentals of aerodynamics. Elements of compressible flow. Normal and oblique shock waves. Flows through nozzles, diffusers and wind tunnels. Elements of the method of characteristics and finite difference solutions for compressible flows. Aspects of hypersonic flow.

0101	Christopher Cadou TuTh 9:30am - 10:45am	Seats (Total: 135) ESJ 2204
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ENAE311H

Aerodynamics I

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: PHYS271, MATH461, PHYS270, MATH246, ENAE283, ENES220, ENAE202, MATH241, and ENES232. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department. And junior standing or higher.

Fundamentals of aerodynamics. Elements of compressible flow. Normal and oblique shock waves. Flows through nozzles, diffusers and wind tunnels. Elements of the method of characteristics and finite difference solutions for compressible flows. Aspects of hypersonic flow.

0101	Stuart Laurence	Seats (Total: 35)
	TuTh 9:30am - 10:45am	EGR 0135

ENAE362

Aerospace Instrumentation and Experimentation

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH246 and ENAE283. Restriction: Must be in Engineering: Aerospace program; and junior standing or higher.

Basic instrumentation electronics including DC electronics, AC electronics, semiconductors, electro-optics and digital electronics. Sensing devices used to carry out experiments in Aerospace Engineering includes metrology, machine tool measurements, bridge circuits, optical devices, and introduction to computer based data acquisition. Topics chosen to support measurements in aerodynamics, flight structures and flight control.

0101	Allen Winkelmann	Seats (Total: 28)
	MW 1:00pm - 1:50pm	EGR 1202
	M 2:00pm - 5:00pm	EGL 0123 Lab
0102	Allen Winkelmann	Seats (Total: 28)
	MW 1:00pm - 1:50pm	EGR 1202
	Tu 2:00pm - 5:00pm	EGL 0123 Lab
0103	Allen Winkelmann	Seats (Total: 28)
	MW 1:00pm - 1:50pm	EGR 1202
	W 2:00pm - 5:00pm	EGL 0123 Lab
0104	Allen Winkelmann	Seats (Total: 28)
	MW 1:00pm - 1:50pm	EGR 1202
	Th 2:00pm - 5:00pm	EGL 0123 Lab
0105	Allen Winkelmann	Seats (Total: 28)
	MW 1:00pm - 1:50pm	EGR 1202
	W 8:50am - 11:50am	EGL 0123 Lab
0106	Allen Winkelmann	Seats (Total: 28)
	MW 1:00pm - 1:50pm	EGR 1202
	F 8:50am - 11:50am	EGL 0123 Lab

ENAE380**Flight Software Systems**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENAE283 and ENAE202. Restriction: Must be in Engineering: Aerospace program; and junior standing or higher.

Avionics using advanced sensor and computing technologies are at the heart of every modern Aerospace vehicle. Advanced software systems to improve cockpit safety and enable unmanned and deep-space missions. Object-oriented programming and software engineering concepts required to design and build complex flight software systems. Software validation, verification and real-time performance analysis to assess flight software system reliability and robustness. Human-machine interface design for piloted systems. Automatic onboard data acquisition and decision-making for unmanned air and space vehicles.

Three hours of lecture and two hours of laboratory per week. Prerequisite: ENAE202 and ENAE283. Junior standing. For ENAE majors only.

0101	Anthony Banes MW 12:00pm - 12:50pm F 9:00am - 10:50am	Seats (Total: 28) BPS 1243 EGR 0312	Lab
0102	Anthony Banes MW 12:00pm - 12:50pm F 11:00am - 12:50pm	Seats (Total: 28) BPS 1243 EGR 0312	Lab
0103	Anthony Banes MW 12:00pm - 12:50pm F 1:00pm - 2:50pm	Seats (Total: 28) BPS 1243 EGR 0312	Lab
0201	Huan Xu MW 12:00pm - 12:50pm M 9:00am - 10:50am	Seats (Total: 28) PLS 1140 EGR 0312	Lab
0202	Huan Xu MW 12:00pm - 12:50pm Tu 2:00pm - 3:50pm	Seats (Total: 28) PLS 1140 EGR 0312	Lab
0203	Huan Xu MW 12:00pm - 12:50pm M 2:00pm - 3:50pm	Seats (Total: 28) PLS 1140 EGR 0312	Lab

ENAE398H**Honors Research Project**

(Perm req)

Credits: 1-3

Grading Method: Regular

Planned sequence of steps in aerospace honors research in which students take three (3) consecutive semesters of this course in partial fulfillment of aerospace engineering honors program requirements. The first semester consists of a series of seminars and meetings with faculty mentors on honors research; two semesters consist of undergraduate honors research project and paper conducted under the direction of an aerospace engineering faculty member to be presented at a conference.

Contact department for information to register for this course.

ENAE403

Aircraft Flight Dynamics

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENAE414 and ENAE432. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Study of motion of aircraft, equations of motion, aerodynamic force representation, longitudinal and lateral motions, response to controls and to atmospheric disturbances, handling qualities criteria and other figures of merit.

0101	Michael Otte	Seats (Total: 70)
	TuTh 3:30pm - 4:45pm	ESJ 2212

ENAE423

Vibration and Aeroelasticity

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENAE324. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Dynamic response of single and multiple degrees of freedom systems, finite element modeling, wing divergence, aileron reversal, wing and panel flutter.

0101	Andrew Becnel	Seats (Total: 130)
	MWF 11:00am - 11:50am	ESJ 1202

ENAE423H

Vibration and Aeroelasticity

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENAE324. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Dynamic response of single and multiple degrees of freedom systems, finite element modeling, wing divergence, aileron reversal, wing and panel flutter.

0101	Norman Wereley	Seats (Total: 37)
	MW 10:30am - 11:45am	AJC 2121

ENAE441 Space Navigation and Guidance

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENAE404 and ENAE432. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Principles of navigation. Celestial, radio, and inertial navigation schemes. Navigational and guidance requirements for orbital, planetary, and atmospheric entry missions. Fundamentals of communications and information theory. Link budgets, antennas and telemetry systems.

0101	Liam Healy	Seats (Total: 100)
	TuTh 9:30am - 10:45am	CHE 2110

ENAE455 Aircraft Propulsion and Power

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: ENES232, ENAE414, and ENAE311. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Thermodynamic cycle analysis, aerothermochemistry of fuels and propellants, operating principles of piston, turbojet, fanjet, and other variations of airbreathing aircraft power units.

0101	Kenneth Yu	Seats (Total: 70)
	TuTh 12:30pm - 1:45pm	PLS 1140

ENAE457 Space Propulsion and Power

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: PHYS271, ENES232, PHYS270, and ENAE311. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department. And senior standing.

Thermodynamic cycle analysis, aerothermochemistry of fuels and propellants, operating principles of rocket, ion, and other exoatmospheric power units.

0101	Raymond Sedwick	Seats (Total: 100)
	TuTh 2:00pm - 3:15pm	CHM 1402

ENAE481 Principles of Aircraft Design

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENAE324, ENAE362, and ENAE432. Corequisite: ENAE414. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Aircraft design principles blending both synthesis and analysis. The iterative nature of the design process. Applied aerodynamics. Elements of aircraft performance calculation and optimization. Design of aircraft including payload, crew and avionics provisions, propulsion selection and sizing, aerodynamic configuration optimization, mass properties, stability and control characteristics, and vehicle subsystems. Individual student projects in aircraft design.

This course is restricted to students in the AHS Helicopter Design Competition and requires permission of the department to enroll.

0101	Dominic Palumbo	Seats (Total: 45)
	MWF 2:00pm - 2:50pm	PHY 1204
0201	Sung Lee	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	CHM 0124
	<i>This course is restricted to students on the Design, Build, Fly team and requires permission from the department to enroll.</i>	
0301	Vengalattore Nagaraj	Seats (Total: 10)
	MWF 2:00pm - 2:50pm	CHE 2140
	<i>This course is restricted to students in the AHS Helicopter Design Competition and requires permission of the department to enroll.</i>	
0401	James Baeder	Seats (Total: 10)
	MWF 3:00pm - 3:50pm	ITV 1111
	<i>Restricted to students in the DOE Challenge and requires permission of the instructor to enroll.</i>	

ENAE483 Principles of Space Systems Design

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENAE404, ENAE324, ENAE362, and ENAE432. Restriction: Must be in Engineering: Aerospace program; or permission of ENGR-Aerospace Engineering department.

Principles of space systems analysis and vehicle design. Launch vehicle performance analysis and optimization. Design of vehicle systems including avionics, power, propulsion, life support, human factors, structures, actuator and mechanisms, and thermal control. Design processes and design synthesis. Individual student projects in vehicle design.

0101	David Akin, Andrew Becnel	Seats (Total: 100)
	TuTh 11:00am - 12:15pm	KEB 1110

ENAE499 Elective Research

(Perm req)

Credits: 3 Grading Method: Regular

Undergraduate research project and paper conducted under the direction of an aerospace engineering faculty member to be presented at a conference or competition.

Contact department for information to register for this course.

ENAE601 Astrodynamics

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENAE404; or permission of ENGR-Aerospace Engineering department.

Mathematics and applications of orbit theory, building upon the foundations developed in ENAE 404 and ENAE 441. Topics include two body orbits, solutions of Kepler's equation, the two-point boundary value problem, rendezvous techniques, and Encke's method.

0101	Matthew Marcus	Seats (Total: 25)
	MW 6:30pm - 7:45pm	EGR 1102

ENAE603 Near-Earth Object Exploration

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENAE601. Restriction: Must be in one of the following programs (ENGR: MS/PhD-Aerospace Engineering (Master's); ENGR: MS/PhD-Aerospace Engineering (Doctoral)). Credit only granted for: ENAE788N or ENAE603. Formerly: ENAE788N.

An overview of the near-Earth objects (NEOs) of our solar system--the asteroids and comets whose orbits closely approach Earth's orbit--and what we know about them, what we're learning about them, and how to design spacecraft missions to interact with them.

0101	Brent Barbee	Seats (Total: 15)
	TuTh 5:00pm - 6:15pm	EGR 3111

ENAE631 Helicopter Aerodynamics I

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENAE414 and ENAE311. Or permission of ENGR-Aerospace Engineering department; and permission of instructor.

A history of rotary-wing aircraft, introduction to hovering theory, hovering and axial flight performance, factors affecting hovering and vertical flight performance, autorotation in vertical descent, concepts of blade motion and control, aerodynamics of forward flight, forward flight performance, operational envelope, and introduction to rotor acoustics.

Those sections that begin with a letter are taught via ITV and are not intended for College Park campus students.

0101	Inderjit Chopra	Seats (Total: 20)
	TuTh 9:30am - 10:45am	JMP 2216
SG01	Inderjit Chopra	Seats (Total: 5)
	TuTh 9:30am - 10:45am	Location: TBA
SM01	Inderjit Chopra	Seats (Total: 5)
	TuTh 9:30am - 10:45am	Location: TBA
TV01	Inderjit Chopra	Seats (Total: 5)
	TuTh 9:30am - 10:45am	Location: TBA

ENAE636 Helicopter Dynamics II

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: ENAE788R or ENAE636. Formerly: ENAE788R.

Aerodynamics, dynamics and aeromechanics of helicopters and tilt rotor aircraft. Experimental testing and mathematical modeling required for the design and analysis of such aircraft.

0101	Anubhav Datta	Seats (Total: 15)
	MW 9:30am - 10:45am	EGR 1110

Linear System Dynamics

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENAE432.

Linear systems; state space, multi-input, multi-output models; eigenstructure; controllability, observability, singular value analysis; multivariable Nyquist condition; observer design; introduction to Kalman filtering. Full state feedback techniques including pole placement and LQR/LQG techniques; introduction to loop shaping and robustness.

0101	Robert Sanner	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	CHE 2145

ENAE655

Structural Dynamics

Credits: 3 Grading Method: Regular, Audit

Advanced principles of dynamics necessary for structural analysis; solutions of eigenvalue problems for discrete and continuous elastic systems, solutions to forced response boundary value problems by direct, modal, and transform methods.

0101	Olivier Bauchau	Seats (Total: 25)
	MW 11:00am - 12:15pm	JMP 2222
SM01	Olivier Bauchau	Seats (Total: 5)
	MW 11:00am - 12:15pm	Location: TBA
TV01	Olivier Bauchau	Seats (Total: 5)
	MW 11:00am - 12:15pm	Location: TBA

ENAE673

Aerodynamics of Incompressible Fluids

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Undergraduate courses in differential equations, incompressible, and compressible flow (ENAE 311 and ENAE 414 or ENME 331 or ENME 640 or equivalent). Restriction: Must be in ENGR: MS/PhD-Aerospace Engineering (Master's) program.

Topics include: conservation equations, complex potential flow, the Navier-Stokes equations, boundary layers and similarity solutions, solutions to classical problems, and application to wing theory.

0101	Pino Martin	Seats (Total: 20)
	TuTh 9:30am - 10:45am	EGR 3102

ENAE684**Computational Fluid Dynamics I**

(Perm req)

Credits: 3 Grading Method: Regular,
Audit*Restriction: Permission of ENGR-Aerospace Engineering department.**Partial differential equations applied to flow modelling, fundamental numerical techniques for the solution of these equations, elliptic, parabolic, and hyperbolic equations, elements of finite difference solutions, explicit and implicit techniques. Applications to fundamental flow problems.*

0101	James Baeder	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	JMP 2216
SG01	James Baeder	Seats (Total: 5)
	TuTh 11:00am - 12:15pm	Location: TBA
SM01	James Baeder	Seats (Total: 5)
	TuTh 11:00am - 12:15pm	Location: TBA
TV01	James Baeder	Seats (Total: 5)
	TuTh 11:00am - 12:15pm	Location: TBA

ENAE692**Introduction to Space Robotics**Credits: 3 Grading Method: Regular,
Audit*Prerequisite: ENAE301 or ENES221. Recommended: ENAE432.**Introduction to the kinematics, dynamics, and control of robot manipulators. DH parameters, serial and parallel manipulators, kinematic redundancy, sensors, actuators, and mechanism design. Control concepts introduced ranging from independent joint control to impedance control. Examples drawn from space robotics, wearable robotics, and other areas.*

0101	Craig Carignan	Seats (Total: 24)
	MW 5:00pm - 6:15pm	PLS 1184

ENAE788D**Selected Topics in Aerospace Engineering; Advanced Space Systems Design**Credits: 3 Grading Method: Regular,
Audit

0101	David Akin	Seats (Total: 10)
	Contact instructor or department for details.	

ENAE788K Selected Topics in Aerospace Engineering; Estimation and Control of Stochastic Systems

Credits: 3 Grading Method: Regular,
 Audit

0101	Robert Sanner MW 2:00pm - 3:15pm	Seats (Total: 15) JMP 2216
SG01	Robert Sanner MW 2:00pm - 3:15pm	Seats (Total: 5) Location: TBA
SM01	Robert Sanner MW 2:00pm - 3:15pm	Seats (Total: 5) Location: TBA
TV01	Robert Sanner MW 2:00pm - 3:15pm	Seats (Total: 5) Location: TBA

ENAE788M Selected Topics in Aerospace Engineering; Hands on Autonomous Aerial Robotics

(Perm req)

Credits: 3 Grading Method: Regular,
 Audit

Restriction: permission of department. This is an advanced graduate course that exposes the students with mathematical foundations of computer vision, planning and control for aerial robots. The goal is to train the students to develop real-time algorithms for the realization of autonomous aerial systems. The course is designed to balance theory with an application on hardware. The assignments will require a significant investment of time and energy. All projects will be carried using quadrotors in a group of students.

0101	Nitin Sanket, John Aloimonos, Chahat Singh TuTh 3:00pm - 4:15pm	Seats (Total: 20) EGR 3102
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ENAE788P Selected Topics in Aerospace Engineering; Analysis of Structural Elements

Credits: 3 Grading Method: Regular,
 Audit

Credit only granted for ENAE788P or ENME808Z. Review of basic concepts of linear elasticity and beam theory. Yield criteria. Introduction to thermoelasticity. Variational calculus and variational principles in elasticity. Principle of virtual work, principle of complimentary virtual work, principle of minimum potential energy, principle of minimum complimentary potential energy. Applications to beams and plates; strategies for obtaining approximate solutions. Buckling and shear deformations in beams and plates.

0101	Olivier Bauchau	Seats (Total: 20)
	MW 2:00pm - 3:15pm	AJC 2119

ENAE788U Selected Topics in Aerospace Engineering; Wind Energy Theory and Design

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

0401	James Baeder	Seats (Total: 10)
	MWF 3:00pm - 3:50pm	Location: TBA

ENAE799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ENAE898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ENAE899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

ENCE Engineering, Civil Fall 2019

ENCE100 Introduction to Civil and Environmental Engineering

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

An overview of the department of Civil and Environment Engineering. Students are introduced to the undergraduate curriculum and will be exposed to other undergraduate and graduate students at various points in their program. The course blends panel presentations by seniors and graduate students, faculty and practitioners with a project and book review to be performed by the students.

0101	Charles Schwartz	Seats (Total: 132)
	F 1:00pm - 1:50pm	CHM 1402

ENCE200 Civil Engineering Computation

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENES100, MATH141, and ENES102; and permission of ENGR-Civil & Environmental Engineering department. Credit only granted for: ENCE200 or ENCE202. Formerly: ENCE202.

Development of knowledge and skills in managing, analyzing, interpreting, and communicating spatial information. Computer Aided Drawing (CAD) and Geographic Information Systems (GIS) are introduced in the context of civil and environmental engineering applications.

0101	Frank White	Seats (Total: 38)
	MW 2:00pm - 3:15pm	EGR 1156
0201	Frank White	Seats (Total: 38)
	MW 3:30pm - 4:45pm	EGR 1156

ENCE201 Engineering Information Processing

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENES220 and MATH241; and permission of ENGR-Civil & Environmental Engineering department. Corequisite: MATH246. Credit only granted for: ENCE201 or ENCE203.

Exploration of algorithms for solving problems in several important areas of numerical computing: roots of equations; matrix algebra and the systems of linear equations; function approximation, numerical differentiation and integration; and ordinary differential equations. Issues of solution accuracy, robustness, and efficiency are also considered. Numerical techniques are presented in the context of engineering applications, and example problems are solved using a variety of computer-based tools (primarily MATLAB).

0101	Peter Chang	Seats (Total: 50)
	MWF 2:00pm - 2:50pm	ANS 0408

ENCE215 Engineering for Sustainability

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHEM135; and permission of ENGR-Civil & Environmental Engineering department.

Engineers have a key role to play in planning, designing, building, and ensuring a sustainable future. In this class, a problem-based approach is used to examine fundamentally-based analyses and approaches for engineering as sustainable society, with a focus on sustainable use of energy and materials, sustainable infrastructure solutions, atmospheric sustainability and sustainable water supply, and human population growth and resource consumption and its implications for sustainability.

0101	Natasha Almeida e Andrade	Seats (Total: 24)
	TuTh 9:30am - 10:45am	EGR 2116

0201	Natasha Almeida e Andrade	Seats (Total: 24)
	TuTh 2:00pm - 3:15pm	EGR 3114
0301	Natasha Almeida e Andrade	Seats (Total: 24)
	TuTh 8:00am - 9:15am	EGR 1102

ENCE300

(Perm req)

Fundamentals of Engineering Materials

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENES220; and permission of ENGR-Civil & Environmental Engineering department.

Behavior, physical, mechanical and chemical properties, design and performance of civil engineering materials, including aggregates, cement, concrete, asphalt binders and mixtures, plastics and geosynthetics, timber, metals and alloys. Modified and advanced highway materials (polymer and rubber modified mixtures, high performance concrete, composites, smart materials). Laboratory testing with hands-on experience on aggregates, Portland cement concrete, asphalt mixtures, timber and metals as per SUPERAVE, ACI design methods, and ASTM standards and specifications.

Restricted to students in the College of Engineering.

0101	Dimitrios Goulas	Seats (Total: 18)
	Tu 12:30pm - 2:30pm	ESJ 1202
	Th 10:30am - 12:30pm	EGL 0120 Lab
0102	Dimitrios Goulas	Seats (Total: 18)
	Tu 12:30pm - 2:30pm	ESJ 1202
	Th 12:30pm - 2:30pm	EGL 0120 Lab
0201	Dimitrios Goulas	Seats (Total: 18)
	Tu 12:30pm - 2:30pm	ESJ 1202
	Th 2:30pm - 4:30pm	EGL 0120 Lab
0202	Dimitrios Goulas	Seats (Total: 18)
	Tu 12:30pm - 2:30pm	ESJ 1202
	Th 4:30pm - 6:30pm	EGL 0120 Lab

ENCE302

(Perm req)

Probability and Statistics for Civil and Environmental Engineers

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: MATH246 and ENCE201; and permission of ENGR-Civil & Environmental Engineering department.

Statistics is the science of data. Civil Engineers must often make decisions based on incomplete, variable or uncertain information. In addition, modern methods of design and analysis need to account for variability in natural, engineered and human systems. After successful completion of this class, a student should have facility and familiarity with established basic techniques for managing data, modeling variability and uncertainty, communicating about data and decisions, and supporting or defending a decision or judgment based on uncertain or incomplete data.

Restricted to students in the College of Engineering.

0101	Bilal Ayyub	Seats (Total: 65)
	MWF 2:00pm - 2:50pm	PHY 1201

ENCE305 Fundamentals of Engineering Fluids

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENES220, PHYS260, and PHYS261; and permission of ENGR-Civil & Environmental Engineering department. Credit only granted for: ENCE305 or ENCE330. Formerly: ENCE330.

The theoretical bases for fluid statics and dynamics, including the conservation of mass, energy and momentum. Modeling of hydraulic systems are introduced. Emphasis on pipe flow and open-channel hydraulics, with real-world applications.

0101	Kaye Brubaker	Seats (Total: 32)
	MWF 8:00am - 8:50am	CHE 2136
0102	Richard McCuen	Seats (Total: 40)
	MWF 10:00am - 10:50am	EGR 1104

ENCE310 Introduction to Environmental Engineering

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS260 and ENCE215; and permission of ENGR-Civil & Environmental Engineering department.

Introduction to the physical, chemical and biological systems relating to the quality of water, land and air environments. Fundamental principles will be emphasized, current environmental pollution problems will be examined and methods of pollution abatement discussed.

0101	Guangbin Li	Seats (Total: 66)
	TuTh 8:00am - 9:15am	EGR 0108

ENCE320 Introduction to Project Management

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering or in the Project Management Minor. Credit only granted for: ENCE320 or ENCE325.

Learn the fundamentals of project management and the analytical skills for the management side of engineering projects. Topics include economic analysis, project screening and selection, organizational and project structure, scheduling, budgeting, resource management, life cycle costing, and project control.

Restricted to students in the College of Engineering.

0101	Gregory Baecher	Seats (Total: 150)
	Th 5:00pm - 7:30pm	ESJ 1224

ENCE325 Introduction to Construction Project Management

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in a major in ARCH-School of Architecture, Planning, & Preservation; or must be in the Construction Project Management minor. And permission of ENGR-Civil & Environmental Engineering department. Credit only granted for: ENCE 320 or ENCE 325.

Learn the basic topics in sourcing, planning, financing, designing, contracting, constructing and operating buildings and other facilities in the built infrastructure. Topics include construction economics, design constructability reviews, construction process planning, contracts and procurement strategies, project scheduling and resource utilization, site layout planning, project cost and quality controls, temporary structures, environmental sustainability, project handover procedures, facility operation and management, IT-based tools for construction project and resource management.

0101	Stephen Wooldridge	Seats (Total: 59)
	Th 5:00pm - 7:30pm	EGR 0108

ENCE340 Fundamentals of Geotechnical Engineering

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENES220; and permission of ENGR-Civil & Environmental Engineering department.

Introductory study of soils in civil engineering. Soil origin, phase relationships and classification schemes. Soil hydraulics: capillary, effective stress, permeability and seepage considerations. Basic stress distribution theories and soil consolidation-settlement analysis. Integration of shear strength evaluation with slope stability analysis. If time permits, topics such as applications in geoenvironmental engineering will be covered.

0101	Ahmet Aydilek	Seats (Total: 57)
	TuTh 9:30am - 10:45am	CSI 2117

ENCE353 Introduction to Structural Analysis

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department; and (MATH246 and ENES220).

The basic tools of structural analysis and design. Design loads. Equilibrium of external and internal forces. Shear and moment diagrams in beams and frames. Truss analysis. Influence line diagrams. The slope-deflection method and method of consistent deformation. Matrix stiffness methods for beams, frames and trusses.

Restricted to students in the College of Engineering.

0101	Mark Austin	Seats (Total: 60)
	MWF 9:00am - 9:50am	CHM 2201

ENCE360 Analysis of Civil Engineering Systems

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENCE201 and MATH140; and permission of ENGR-Civil & Environmental Engineering department.

Introduction to systems approach and systems analysis in civil and environmental engineering. Introduction to systems analysis tools that facilitate engineering management decision making including optimization and computer simulation. Introduction to linear and nonlinear mathematical optimization including linear and integer programming, elementary nonlinear programming and dynamic programming.

0101	Ali Haghani	Seats (Total: 36)
	TuTh 9:30am - 10:45am	EGR 1156

0102	Ali Haghani	Seats (Total: 36)
	TuTh 11:00am - 12:15pm	EGR 1156

ENCE370 Introduction to Transportation Engineering and Planning

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENCE201, PHYS260, and PHYS261; and permission of ENGR-Civil & Environmental Engineering department.

Engineering problems of transportation by highways, airways, pipelines, waterways, and railways. Transportation modes and technologies, vehicle dynamics, basic facility design, traffic stream models, capacity analysis, transportation planning, evaluation and choice, and network analysis.

Restricted to students in the College of Engineering.

0101	Paul Schonfeld	Seats (Total: 60)
	MWF 1:00pm - 1:50pm	PHY 1201

ENCE411 Environmental Engineering Science

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENCE310; and permission of ENGR-Civil & Environmental Engineering department.

Introduces the analytical techniques available to assess performance of engineering processes as they relate to water, soil, and air treatment and quality. The basic principles of environmental management, economics of waste treatment, by-product reutilization, and energy cycles are introduced and discussed. Alternative technologies are introduced and evaluated mostly by assessing their potential to reduce waste, minimize energy use, and promote sustainability. Students' activities include, a weekly lab to provide hands-on experience with environmental quality measurements and treatment techniques; on-site visits to regional industries that undertake sustainable practices; and a final research project where experimental design and laboratory techniques are used to assess interactions between technologies and natural systems and their potential for reducing environmental impacts.

0101	Alba Torrents	Seats (Total: 12)
	TuTh 11:00am - 11:50am	EGR 2154
	W 10:00am - 1:00pm	EGR 0136 Lab
0102	Alba Torrents	Seats (Total: 12)
	TuTh 11:00am - 11:50am	EGR 2154
	W 2:00pm - 5:00pm	EGR 0136 Lab

ENCE420**Selection and Utilization of Construction Equipment**

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in the Construction Project Management minor.

Learn to evaluate and select construction equipment with a focus on mechanized equipment for earthwork and building construction. Learn about the parties involved in procurement, operation and maintenance, and how to cost-effectively plan, select, and utilize equipment for earthmoving, paving, formwork, trenching, rock excavation, tunneling, site preparation, and steel and concrete construction. Explore trends in equipment design, construction automation, and robotics.

0101	Mirosław Skibniewski	Seats (Total: 25)
	M 3:30pm - 6:00pm	EGR 2154

ENCE422**Project Cost Accounting and Economics**

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in the Construction Project Management Minor; or must be in the Project Management Minor.

Learn: the fundamentals of accounting; project cost accounting principles as they apply to project management; project cost accounting; and the fundamentals of engineering economics. Topics include: project feasibility analysis; reading and analyzing financial statements; cash management; cash flow analysis; depreciation and taxes; and impact on profitability; the principles of activity based costing; net present value analysis; the framework for project performance measurement, cost performance indices, and earned value analysis.

0101	Qingbin Cui	Seats (Total: 60)
	M 5:00pm - 7:30pm	KEB 1200

ENCE423**Project Planning, Estimating & Scheduling**

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in the Construction Project Management Minor; or must be in the Project Management Minor. And permission of ENGR-Civil & Environmental Engineering department.

Learn the fundamentals of project planning, estimating, and scheduling. Understand the concepts of planning; to reduce uncertainty, improve efficiency of the operation, to set and meet objectives, and to provide a basis for monitoring and controlling the work. Be introduced to: the concepts of resource definition, assignment and management, and; the basics of project estimating (pricing) methods including global pricing strategies, types of estimates, pricing processes, overhead and profit, and project financing. Learn the basics of project scheduling including; bar charts, network-based methodologies, and linear scheduling techniques. Emphasis is placed on Critical Path Method (CPM) scheduling, a network based methodology. Be exposed to the use of scheduling software and will actually develop a CPM schedule for an actual construction project as part of a semester project.

Restricted to students in the College of Engineering.

0101	Kenneth O'Connell	Seats (Total: 70)
	M 5:00pm - 7:30pm	EGR 0108

ENCE424 Communication for Project Managers

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in the Construction Project Management Minor; or must be in the Project Management Minor.

Learn the fundamentals of communications for project managers. Emphasis is on interpersonal and group communications; through voice, electronic, and written messages; project cycle and reports and presentations during this cycle; and communications for employment.

0101	Shana Webster-Trotman	Seats (Total: 35)
	Tu 5:00pm - 7:30pm	ESJ 0215
0102	Shana Webster-Trotman	Seats (Total: 35)
	W 5:00pm - 7:30pm	ESJ B0320

ENCE426 Construction Documentation and BIM Applications in Engineering and Construction

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; or must be in the Construction Project Management Minor; or must be in the Project Management Minor.

Learn the basics of construction documentation methods, with particular emphasis on Building Information Modeling (BIM). Topics include: the fundamentals of assembly, coordination, and maintenance of construction documents and implementation of BIM techniques in the design and construction processes, and; a review of Autodesk, Revit, and Navisworks and other leading BIM software. Lectures from project management faculty supplemented by guest lecturers from the construction industry.

0101	Jason Dreher	Seats (Total: 40)
	W 5:00pm - 7:30pm	EGR 1156
0201	Jason Dreher	Seats (Total: 40)
	Th 5:00pm - 7:30pm	EGR 1156

ENCE432

Ground Water Hydrology

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENCE305; and permission of ENGR-Civil & Environmental Engineering department.

Concepts related to the development of the ground water resources, hydrology, hydrodynamics of flow through porous media, hydraulics of wells and basin-wide ground water development. Fundamentals of ground water pollution are introduced.

Restricted to students in the College of Engineering.

0101	Kaye Brubaker	Seats (Total: 42)
	MWF 9:00am - 9:50am	CHE 2136

ENCE433

Assessment of Natural Hazards for Engineering Applications

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENCE302. Jointly offered with ENCE633. Credit only granted for: ENCE433 or ENCE633.

Ensuring the resilience of infrastructure and other engineered systems requires an assessment of the natural hazards to which the systems are exposed. Probabilistic natural hazard assessment evaluates how likely a location is to experience hazard events (e.g., hurricanes or earthquakes) and how likely those events are to cause various impacts (e.g., large surges, intense rainfall, high winds, or ground shaking). This course will review the basic science of natural hazards and provide the foundational concepts of probability and statistics required for developing models to assess the frequency and severity of natural hazards. This course will present methodologies for assessment of multiple types of natural hazards (e.g., seismic, precipitation, riverine, coastal, and wind hazards).

0101	Michelle Bensi	Seats (Total: 25)
	M 2:00pm - 4:40pm	CHE 2145

ENCE441 Foundation Design

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENCE340; and permission of ENGR-Civil & Environmental Engineering department.

Critical review of classical lateral earth pressure theories, analysis of retaining walls and reinforced earth walls, subsurface explorations, bearing capacity and settlement of shallow foundations, design of deep foundations that includes both pile foundations and drilled shafts.

Restricted to students in the College of Engineering.

0101	Mohamed Aggour	Seats (Total: 90)
	TuTh 11:00am - 12:15pm	CHE 2108

ENCE444 Experimental Methods in Geotechnical Structural Engineering

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENCE353 and ENCE340; and permission of ENGR-Civil & Environmental Engineering department.

In the geotechnical engineering part of the course, major soils testing and their interpretation including classification, compaction, strength, and compressibility will be undertaken. The structural engineering part of this course covers test planning, loading apparatus, instrumentation, data acquisition and data analysis, as well as basic aspects of structural testing techniques and shake-table test.

0101	Ahmet Aydilek, Yunfeng Zhang	Seats (Total: 20)
	Tu 12:30pm - 1:30pm	CHM 0124
	W 1:00pm - 4:00pm	EGL 0120 Lab
0201	Yunfeng Zhang, Ahmet Aydilek	Seats (Total: 15)
	Tu 12:30pm - 1:30pm	CHE 2140
	W 1:00pm - 4:00pm	EGL 0106 Lab

ENCE454 Design of Concrete Structures

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENCE353; and permission of ENGR-Civil & Environmental Engineering department. Formerly: ENCE451.

Combined bending and compression, development and anchorage of reinforcement, deflections, design of slabs including one-way and two-way, design of footings, retaining walls, introduction to prestressed concrete, design of multi-story buildings.

0101	Amde Amde	Seats (Total: 49)
	MWF 11:00am - 11:50am	CSI 2117
0201	Amde Amde	Seats (Total: 35)
	MWF 10:00am - 10:50am	EGR 2154

ENCE466 Design of Civil Engineering Systems

(Perm req)

Credits: 3 Grading Method: Regular, CORE: CS
Audit

Prerequisite: Permission of ENGR-Civil & Environmental Engineering department. Restriction: Senior standing. Additional information: Must be taken in the semester in which the student graduates.

A major civil engineering design experience that emphasizes development of student creativity, development and use of design methodologies, evaluation of alternate solutions, feasibility considerations, and detailed system descriptions. Realistic design constraints including economic factors, safety, aesthetics, and reliability will be imposed. Students will work in design project groups and be required to exercise oral and written communication skills.

Restricted to students in the College of Engineering.

0101	Russell Anderson	Seats (Total: 40)
	Tu 3:30pm - 4:45pm	PLS 1140
	Th 3:30pm - 4:45pm	EGR 1156 Lab
0102	Russell Anderson	Seats (Total: 40)
	Tu 3:30pm - 4:45pm	PLS 1140
	Th 2:00pm - 3:15pm	EGR 1156 Lab

ENCE470 Highway Engineering

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENCE302 and ENCE370; and permission of ENGR-Civil & Environmental Engineering department.

Highway location and design, highway engineering economics, traffic engineering, traffic measurement devices and technologies. Includes discussion of technological advances in traffic flow and capacity, such as signal systems, corridor control, automatic driver information, incident detection and autonomous vehicle operation.

Restricted to students in the College of Engineering.

0101	ShiaauLir Wang	Seats (Total: 40)
	MWF 10:00am - 10:50am	EGR 0135

ENCE489 Special Problems in Civil Engineering

Credits: 1-4 Grading Method: Regular,
Pass-Fail, Audit

A course arranged to meet the needs of exceptionally well prepared students for study in a particular field of civil engineering.

Contact department for information to register for this course.

ENCE602 Project Procurement Management

Credits: 3 Grading Method: Regular,
Audit

Fundamental concepts and techniques for project acquisition and procurement are presented. Students are introduced to the PMBOK Guide six-step procurement process and expected to develop an in-depth understanding of project evaluation, planning, financing, contracting, negotiation, and procurement execution. It will also cover emerging methods, principles, and practices in infrastructure project procurement, including Public-Private Partnerships, Carbon project procurement, and Clean Development Mechanism.

0101	Qingbin Cui	Seats (Total: 17)
	M 1:00pm - 3:40pm	JMP 2120

ENCE606 Graduate Introduction to Project Scheduling

Credits: 3 Grading Method: Regular,
Audit

Students are taught the basics of project scheduling and the various scheduling approaches that are currently being used in the design and construction industry. Project planning techniques will be covered and basic scheduling methods will be taught including the use of bar charts. Critical Path Method (CPM), Program Evaluation and Review (PERT) and Linear Scheduling (Line of Balance) methods.

0101	Kenneth O'Connell	Seats (Total: 25)
	Tu 4:00pm - 6:40pm	JMP 2222

ENCE610 Fundamentals of Structural Analysis

Credits: 3 Grading Method: Regular,
Audit

Cartesian tensor notation. Linear forms of the general equilibrium, compatability, and constitutive equations. The calculus of variations. The principles of virtual work and complementary virtual work. Self-adjoint problem formulations.

0101	Peter Chang	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	EGR 3114

ENCE613 Structural Dynamics

Credits: 3 Grading Method: Regular,
Audit

Formerly: ENCE653.

Analysis of the dynamic response of structures and structural components subjected to impact load, transient load, and ground excitations; study of single degree-of-freedom and multi degree-of-freedom systems in classical closed form solution and approximate numerical solution; solution in the frequency domain and the use of finite element method.

0101	Yunfeng Zhang	Seats (Total: 25)
	W 5:00pm - 7:30pm	EGR 3114

ENCE620 Risk Analysis for Engineering

Credits: 3 Grading Method: Regular,
Audit

Sources of hazards, definition of risk, system analysis, functional modeling and analysis techniques, probabilistic risk assessment procedure, risk methods, risk acceptance, assessment of failure likelihood, consequence assessment, risk benefit assessment, uncertainty surces and types, modeling uncertainty, risk analysis and decision making under uncertainty, collection of data, expert-opinion elicitation, human-machine interface and human factors engineering.

0101	Bilal Ayyub	Seats (Total: 20)
	MW 11:00am - 12:15pm	EGR 3102

ENCE622**Construction Automation & Robotics**

Credits: 3 Grading Method: Regular,
Audit

Covers advanced technologies leading to redesign and partial or full automation of selected construction processes utilizing industrial robotics. Lectures and presentations will cover topics such as basic robotic technology (robot kinematics and dynamics, industrial manipulators, mobility bases, end effectors, sensors, control systems, and robot task programming), design of automated construction processes, selection of means and methods for automated construction processes, robot ergonomics and safety, calculation of costs and benefits of construction robots in selected applications, engineering and economic feasibility of automation and robotics in the construction industry.

PM01	Miroslaw Skibniewski	Seats (Total: 25)
	Class time/details on ELMs	ONLINE
	Weekly video conference: Thursday 8PM-9PM.	

ENCE627**Project Risk Management**

Credits: 3 Grading Method: Regular

Restriction: Must not have completed ENCE627.

Introduction to identifying, analyzing, assessing, and managing risks inherent to engineering projects. Includes: probability modeling, choice and value theory, schedule and cost risk, risk mitigation and transfer, and contract considerations of project risk. Examples are drawn from construction, software development, systems integration, and other large engineering projects; and cover probability basics, subjective probability, statistical data analysis, introduction to decision theory, Monte Carlo simulation, value of information, and risk-based decision making.

Introduction to identifying, analyzing, assessing, and managing risks inherent to engineering and disaster mitigation projects. Includes: probability modeling, choice and value theory, schedule and cost risk, risk mitigation and transfer, and contract considerations of risk. Examples are drawn from construction, software development, systems integration, natural hazards management, and other large engineering activities. The course focuses on the conceptual underpinnings of risk and uncertainty, covering probability basics, subjective probability, basics, subjective probability, statistical data analysis, introduction to decision theory, Monte Carlo simulation, value of information, and risk-based decision making.

PM01	Gregory Baecher	Seats (Total: 40)
	Class time/details on ELMs	ONLINE
	Weekly video conference: Thursday 7AM-8AM or Wednesday 6PM-7PM.	

ENCE630**Environmental and Water Resource Systems I**

Credits: 3 Grading Method: Regular,
Audit

0101	Richard McCuen	Seats (Total: 18)
	TuTh 9:30am - 10:45am	EGR 3111

Credits: 3 Grading Method: Regular, Audit

Ensuring the resilience of infrastructure and other engineered systems requires an assessment of the natural hazards to which the systems are exposed. Probabilistic natural hazard assessment evaluates how likely a location is to experience hazard events (e.g., hurricanes or earthquakes) and how likely those events are to cause various impacts (e.g., large surges, intense rainfall, high winds, or ground shaking). This course will review the basic science of natural hazards and provide the foundational concepts of probability and statistics required for developing models to assess the frequency and severity of natural hazards. This course will present methodologies for assessment of multiple types of natural hazards (e.g., seismic, precipitation, riverine, coastal, and wind hazards).

0101	Michelle Bensi	Seats (Total: 25)
	M 2:00pm - 4:40pm	CHE 2145

Credits: 3 Grading Method: Regular, Audit

Review of soil properties and subsurface exploration, evaluation and design of shallow foundations, including settlement and bearing capacity of spread footings and mats. Discussion of methods of soil improvement. Analysis and design of deep foundations including single pile, pile load testing, pile group actions, and drilled shaft foundations for both vertical and horizontal loads. Load and resistance factor design concepts will be presented.

0101	Mohamed Aggour	Seats (Total: 25)
	Th 5:00pm - 7:30pm	EGR 1102

ENCE650

Credits: 3

Formerly: ENCE636.

The fundamentals of heterogeneous equilibria, rates of environmental reactions, and flow and material transport or presented. Applications of these principles will be presented to small and large scale environmental problems involving liquid, gas, and solid phases. Both natural and engineered environmental systems will be examined.

0101	Allen Davis	Seats (Total: 20)
	TuTh 9:30am - 10:45am	EGR 1110

FNCF651

Credits: 3

Credit only granted for: ENCE633 or ENCE651. Formerly: ENCE633.

Application of principles from chemical thermodynamics and kinetics to the study and interpretation of the chemical composition of natural waters is rationalized by considering metal ion solubility controls, pH, carbonate equilibria, adsorption reactions, redox reactions and the kinetics of oxygenation reactions which occur in natural water environments.

Cross-listed with MEES698@.

0101	Alba Torrents	Seats (Total: 20)
	TuTh 8:00am - 9:15am	EGR 1110

ENCE652

Credits: 3

Credit only granted for: ENCE637 or ENCE652. Formerly: ENCE637.

An examination of microbiological principles directly affecting humans and the surrounding environment. Special emphasis is given to the understanding of microbial physiology and in environmental engineering related to water and land systems including aerobic and anaerobic treatment processes involved in nutrient/waste recycling as well as impact of xenobiotic compounds on processes water, soil and sediment.

0101	Birthe Kjellerup	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	EGR 3111

ENCE661

Grading Method: Regular,
Audit

This course reviews the fundamentals of accounting; examines project cost accounting principles, applications, and impact on profitability; examines the principles of activity based costing; covers the elements involved in cash management; introduces the framework for how projects are financed and the potential impact financing has on the projects; and a framework for evaluating PC based systems and what resources are needed for an effective project cost system.

0101	James Myers	Seats (Total: 38)
	M 4:00pm - 6:40pm	JMP 2216
	Contact instructor or department for details.	
	<i>Weekly video conference: Monday 4:00 - 5:00pm.</i>	

ENCE662

Grading Method: Regular,
Audit

Introduction to project management including: overview and concepts of project management (principles, body of knowledge, strategies); planning successful projects (defining, specifying, delivery options, scheduling, budgeting); implementing (organizing the team, work assignments, team building, effective leadership); executing (performance measurement, maintaining the schedule, adjustments/mid-course corrections, record keeping, status reporting, communications, managing conflict, time management); and closeout(performance measurement, maintaining the schedule, adjustments/mid-course corrections, record keeping, status reporting, communications, managing conflict, time management).

0101	John Johnson	Seats (Total: 37)
	W 4:00pm - 6:40pm	JMP 2222
PM01	John Johnson	Seats (Total: 30)
	Class time/details on ELMs	ONLINE
	<i>Weekly video conference: Monday 7:00am to 8:00am or 8:00pm to 9:00pm.</i>	
SM01	John Johnson	Seats (Total: 5)
	W 4:00pm - 6:40pm	Location: TBA

ENCE664

Credits: 3

Grading Method: Regular,
Audit

Examines ways in which the legal system affects the design and construction process. Focuses on contract types and the relationships between the parties in different delivery systems. Covers basics of procurement protocols along with negotiating techniques and strategies. Topics include contract law, the relationships between the parties, tort and negligence law, and the statutory principles affecting construction.

Weekly video conference after 7:50 p.m.

PM01	Mark Groff, Thomas Powell, Thomas Barham	Seats (Total: 35)
	Class time/details on ELMs	ONLINE
	Weekly video conference: Tuesday 7AM-8AM or Tuesday 8PM-9PM.	

ENCE665 Management of Project Teams

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Experience has shown that really excellent project managers are not only technically competent but that they have above average skills in human relations and communications. The course will prepare project managers to optimize the utilization of their most important resource: people. Relying primarily on a wide range of research and experience in the Project Team, this course will help guide project managers in building the other skills needed to be truly successful in the competitive Project Team.

Meets Saturday 10:00am-3:15pm face to face on the following dates: 09/07, 10/05, 10/19, 11/16, and 12/07. Video Conference: meets Thursday 6:00pm-7:30pm on the following dates: 08/29, 09/12, 09/19, 09/26, 10/24, 10/31, 11/7, and 11/21.

0101	Jocelyn Davis	Seats (Total: 30)
	Sa 10:00am - 3:15pm	KEB 1107
	Class time/details on ELMs	ONLINE

ENCE666 Cost Engineering and Control

Credits: 3 Grading Method: Regular, Audit

Analytical techniques to estimate and control project costs, including site investigation, quantity takeoff, work analysis, and bid preparation. Systematic cost control as related to job production and historical data. Includes the fundamentals of different types of cost estimating, the appropriate use of each, and examination of popular software. This course is designed to help students develop the ability to utilize techniques of cost estimating, cost and schedule control and project management as they apply to engineering and construction work. Students will understand why it is crucial to understand the various types of cost estimating and the appropriate use of each, activity-based costing, conceptual estimating and budgeting, unit cost estimating, parametric estimating, detailed estimating, learning curves and progress functions.

0101	Neil Schulman	Seats (Total: 25)
	Meets August 26, 2019 - December 2, 2019	
	Tu 1:00pm - 3:40pm	JMP 2217
PM01	Neil Schulman	Seats (Total: 30)
	Meets August 26, 2019 - December 2, 2019	
	Class time/details on ELMs	ONLINE
	<i>Weekly video conferences: Wednesday 7:00-7:50.</i>	
SM01	Neil Schulman	Seats (Total: 5)
	Meets August 26, 2019 - December 2, 2019	
	Tu 1:00pm - 3:40pm	Location: TBA

ENCE670 Highway Traffic Characteristics and Measurements

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENCE470; or permission of instructor.

The study of the fundamental traits and behavior patterns of road users and their vehicles in traffic. The basic characteristics of the pedestrian, the driver, the vehicle, traffic volume and speed, stream flow and intersection operation, parking, and accidents.

0101	Gang-Len Chang	Seats (Total: 29)
	Th 12:30pm - 3:10pm	EGR 2154

ENCE672 Regional Transportation Planning

Credits: 3 Grading Method: Regular,
Audit

Factors involved and the components of the process for planning statewide and regional transportation systems, encompassing all modes. Transportation planning studies, statewide traffic models, investment models, programming and scheduling.

0101	Paul Schonfeld	Seats (Total: 29)
	Tu 5:00pm - 7:30pm	EGR 1104

ENCE688D Advanced Topics in Civil Engineering; Sensor Systems

Credits: 3 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the current literature of civil engineering to suit the needs and background of students. May be taken for repeated credit when identified by topic title.

Cross-listed with ENSE698E. Credit only granted for ENCE688D or ENSE698E.

0101	Pamela Abshire, David Lovell	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	EGR 3102

ENCE688G Advanced Topics in Civil Engineering; Survey Methods and Data Analytics for Transportation

Credits: 3 Grading Method: Regular,
Audit

Advanced topics selected by the faculty from the current literature of civil engineering to suit the needs and background of students. May be taken for repeated credit when identified by topic title.

0101	Cinzia Cirillo	Seats (Total: 20)
	Tu 9:30am - 12:15pm	WDS 1130

ENCE688I Advanced Topics in Civil Engineering; Discrete Choice Analysis

Credits: 3 Grading Method: Regular,
Audit

Advanced topics selected by the faculty from the current literature of civil engineering to suit the needs and background of students. May be taken for repeated credit when identified by topic title.

0101	Cinzia Cirillo	Seats (Total: 20)
	W 10:00am - 12:30pm	CHE 2116

ENCE688T Advanced Topics in Civil Engineering; Disaster Resilience Seminar

Credits: 1 Grading Method: Regular, Audit

Advanced topics selected by the faculty from the current literature of civil engineering to suit the needs and background of students. May be taken for repeated credit when identified by topic title.

This seminar will address varied topics in identifying, analyzing, assessing, and managing engineered systems resilient to natural, anthropogenic, and other hazards. This seminar series comprises guest lectures and internal faculty and student presentations on topics related to disaster resilience. Examples are drawn from foundational concepts; hazard science; planning, engineering, and design; risk and resilience assessment; and implementation.

0101	Gregory Baecher	Seats (Total: 25)
	F 11:00am - 12:00pm	PHY 1402

ENCE689

Seminar

Credits: 1-16 Grading Method: Regular,
Audit

Majors only. Other majors require permission of department.

Contact department for information to register for this course.

ENCE689R

Seminar; Research Methods

Credits: 1 Grading Method: Regular,
Audit

It is strongly recommended for PhD candidates to develop their research topic and build strong research capability. The course provides a sound understanding of the enterprise of engineering research, from selecting a thesis topic, to the development of a research proposal, to planning and executing a research plan, to writing a dissertation and publishable articles. Students will review published research reports, conduct a literature survey, and write a preliminary research proposal. Students will carry out assignments involving design of small experiments, and learn how to statistically analyze data and report results. The course comprises lectures from PM faculty and guest lecturers.

0101	Gregory Baecher	Seats (Total: 25)
	F 10:00am - 10:50am	CHM 1228

ENCE799

Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Majors only. Other majors require permission of department.

Contact department for information to register for this course.

ENCE898

Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

ENCE899

Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Majors only. Other majors require permission of department.

Contact department for information to register for this course.

ENCH609 Graduate Seminar

(Perm req)

Credits: 1 Grading Method: Regular,
Audit

0101	Taylor Woehl	Seats (Total: 35)
	W 9:00am - 10:15am	CHE 2108

ENCH610 Chemical Engineering Thermodynamics

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: CHBE301; and CHBE302. Or students who have taken courses with comparable content may contact the department. Restriction: Permission of ENGR-Chemical & Biomolecular Engineering department.

Advanced application of the general thermodynamic methods to chemical engineering problems. First and second law consequences; estimation and correlation of thermodynamic properties; phase and chemical reaction equilibria.

0101	Mikhail Anisimov	Seats (Total: 35)
	TuTh 3:30pm - 4:45pm	EGR 2154

ENCH620 Methods of Engineering Analysis

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: MATH246; and CHBE250. Or students who have taken courses with comparable content may contact the department. Restriction: Permission of ENGR-Chemical & Biomolecular Engineering department.

Application of selected mathematical techniques to the analysis and solution of engineering problems; included are the applications of matrices, vectors, tensors, differential equations, integral transforms, and probability methods to such problems as unsteady heat transfer, transient phenomena in mass transfer operations, stagewise processes, chemical reactors, process control, and nuclear reactor physics.

0101	Nam Sun Wang	Seats (Total: 35)
	TuTh 5:00pm - 6:15pm	EGR 2154

ENCH648 Special Problems in Chemical Engineering

(Perm req)

Credits: 1-16

Grading Method: Regular,
Audit

Contact department for information to register for this course.

ENCH648C

Special Problems in Chemical Engineering; Control of Air Pollution Sources

Credits: 3

Grading Method: Regular,
Audit

0101	Akua Asa-Awuku	Seats (Total: 8)
	MW 1:00pm - 2:15pm	CHM 1224

ENCH648E

Special Problems in Chemical Engineering; Heterogeneous Catalysis for Energy Applications

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

0101	Dongxia Liu	Seats (Total: 11)
	MW 5:00pm - 6:15pm	CHE 2110

ENCH648F

Special Problems in Chemical Engineering; The Science and Technology of Colloidal Systems

Credits: 3

Grading Method: Regular,
Audit

0101	Taylor Woehl	Seats (Total: 5)
	TuTh 5:00pm - 6:15pm	AJC 2119

ENCH648L

Special Problems in Chemical Engineering; Photovoltaics: Solar Energy

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

0101	Raymond Adomaitis	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	JMP 2216
ME01	Raymond Adomaitis	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	ONLINE

ENCH648P

Special Problems in Chemical Engineering; Protein Engineering

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

0101	Amy Karlsson	Seats (Total: 7)
	TuTh 12:30pm - 1:45pm	EGR 1104

ENCH648W Special Problems in Chemical Engineering; Transport Phenomena in Small and Biological Systems

Credits: 3 Grading Method: Regular,
Audit

0101	Panagiotis Dimitrakopoulos	Seats (Total: 10)
	MW 5:00pm - 6:15pm	CHE 2136

ENCH799 Master's Thesis Research

(Perm req) Credits: 1-6 Grading Method: Regular
Contact department for information to register for this course.

ENCH898 Pre-Candidacy Research

(Perm req) Credits: 1-8 Grading Method: Regular
Contact department for information to register for this course.

ENCH899 Doctoral Dissertation Research; Chemical Engineering

(Perm req) Credits: 6 Grading Method: Regular
Contact department for information to register for this course.

ENCO Engineering, Cooperative Education **Fall 2019**

ENCO099 Co-Op/Intern Work Experience

(Perm req) Credits: 0 Grading Method: Sat-Fail

Participation in a cooperative education (co-op) or internship program enables students to apply the theories that they have learned in their traditional classes with paid, supervised, career-related work experience that develops technical and professional work skills. Contact the Engineering Co-op & Career Services Office.

If dropping course, see Withdrawal and Refund of Fees - Special Refund Deadlines in the Financial Information section of the Schedule of Classes.

0101	Heidi Sauber, Veronica Perrigan	Seats (Total: 200)
	Contact instructor or department for details.	

ENEE101**Introduction to Electrical & Computer Engineering**

(Perm req)

Credits: 3

Grading Method: Regular

Corequisite: MATH140. And corequisite: ENEE140 or CMSC131; or a score of 5 on the A Java AP exam; or a score of 4 or 5 on the AB Java AP exam; or satisfactory performance on the department's placement exam. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer) ; and students cannot enroll in ENEE101 and ENES100 in the same semester.

An exploration of topics within Electrical & Computer Engineering (ECE). Students will be introduced to key elements of both the Electrical Engineering and Computer Engineering curriculum, including: circuits, computing systems and software, communications and controls, electrodynamics and waves, microelectronics, signal processing, and power systems.

0101	Joseph JaJa F 12:00pm - 1:15pm MW 8:00am - 9:50am	Seats (Total: 12) EGR 1202 AVW 1344 Lab
0102	Joseph JaJa F 12:00pm - 1:15pm MW 10:00am - 11:50am	Seats (Total: 12) EGR 1202 AVW 1344 Lab
0103	Joseph JaJa F 12:00pm - 1:15pm MW 12:00pm - 1:50pm	Seats (Total: 12) EGR 1202 AVW 1344 Lab
0104	Joseph JaJa F 12:00pm - 1:15pm MW 2:00pm - 3:50pm	Seats (Total: 12) EGR 1202 AVW 1344 Lab
0105	Joseph JaJa F 12:00pm - 1:15pm TuTh 8:00am - 9:50am	Seats (Total: 12) EGR 1202 AVW 1344 Lab
0106	Joseph JaJa F 12:00pm - 1:15pm TuTh 10:00am - 11:50am	Seats (Total: 12) EGR 1202 AVW 1344 Lab
0107	Joseph JaJa F 12:00pm - 1:15pm TuTh 12:00pm - 1:50pm	Seats (Total: 12) EGR 1202 AVW 1344 Lab

0108	Joseph JaJa F 12:00pm - 1:15pm TuTh 2:00pm - 3:50pm	Seats (Total: 12) EGR 1202 AVW 1344	Lab
0109	Joseph JaJa F 12:00pm - 1:15pm MW 4:00pm - 5:50pm	Seats (Total: 12) EGR 1202 AVW 1344	Lab
0110	Joseph JaJa F 12:00pm - 1:15pm TuTh 4:00pm - 5:50pm	Seats (Total: 12) EGR 1202 AVW 1344	Lab

ENEE140

(Perm req)

Introduction to Programming Concepts for Engineers

Credits: 2

Grading Method: Regular

Prerequisite: Permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in Engineering: Electrical program; or must be in Engineering: Materials Science program.

Introduction to the programming environment: editing, compiling, UNIX, data types and variable scope; program selection, formatted/unformatted input/output, repetition, functions, arrays and strings.

0101	Gang Qu Tu 9:30am - 10:45am WF 8:00am - 8:50am	Seats (Total: 12) CSI 1115 AVW 1454	Discussion
0102	Gang Qu Tu 9:30am - 10:45am WF 9:00am - 9:50am	Seats (Total: 12) CSI 1115 AVW 1454	Discussion
0103	Gang Qu Tu 9:30am - 10:45am WF 10:00am - 10:50am	Seats (Total: 12) CSI 1115 AVW 1454	Discussion
0104	Gang Qu Tu 9:30am - 10:45am WF 11:00am - 11:50am	Seats (Total: 12) CSI 1115 AVW 2446	Discussion
0105	Gang Qu Tu 9:30am - 10:45am WF 1:00pm - 1:50pm	Seats (Total: 12) CSI 1115 AVW 1454	Discussion

0106	Gang Qu	Seats (Total: 12)	
	Tu 9:30am - 10:45am	CSI 1115	
	WF 2:00pm - 2:50pm	AVW 1454	Discussion
0107	Gang Qu	Seats (Total: 12)	
	Tu 9:30am - 10:45am	CSI 1115	
	WF 11:00am - 11:50am	AVW 1454	Discussion

ENEE150

Intermediate Programming Concepts for Engineers

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: Permission of ENGR-Electrical & Computer Engineering department. And ENEE140 or CMSC131; or score of 5 on the A Java AP exam; or score of 4 or 5 on the AB Java AP exam; or satisfactory performance on the department's placement exam. Corequisite: MATH140. Restriction: Must be in Engineering: Electrical program. Credit only granted for: ENEE114 or ENEE150. Formerly: ENEE114.

Advanced programming concepts: coding conventions and style; pointers; dynamic memory allocation and data structures; linked lists; graphs; abstract data types; object-oriented design. There will be team-based software projects and group presentations.

0101	Donald Yeung	Seats (Total: 14)	
	TuTh 11:00am - 12:15pm	EGR 1108	
	F 8:00am - 8:50am	AVW 2446	Discussion
0102	Donald Yeung	Seats (Total: 14)	
	TuTh 11:00am - 12:15pm	EGR 1108	
	F 9:00am - 9:50am	AVW 2446	Discussion
0103	Donald Yeung	Seats (Total: 14)	
	TuTh 11:00am - 12:15pm	EGR 1108	
	F 10:00am - 10:50am	AVW 2446	Discussion
0104	Donald Yeung	Seats (Total: 14)	
	TuTh 11:00am - 12:15pm	EGR 1108	
	F 2:00pm - 2:50pm	AVW 2446	Discussion

ENEE200

Technology and Consequences: Engineering, Ethics, and Humanity

Credits: 3

Grading Method: Regular

CORE: IE

General Education: DSHU,
SCIS

What makes a technology socially responsible? At UMD, the Fearless Ideas campaign asks us to aim our enthusiasm for technology at big real problems. At the same time, we are coming to appreciate the increasingly complex nature of technological systems as they become integrated into all forms of infrastructure, we realize they may be unpredictable, interdependent on social and biological systems, and have unintended consequences. In this midst of this complexity, people make decisions with far reaching impacts. How then do we follow our passion for technology and innovation but also stay skeptical in a way that allows us to consider the potential and shortcomings of technology? Designed for both engineering and non-engineering students wishing to explore and assess the impact of engineering technology on society and the role of society in generating that technology.

0101	Logan Williams	Seats (Total: 16)	
	Tu 9:30am - 10:45am	ESJ 1202	
	Th 9:30am - 10:20am	ESJ 1202	
	F 9:00am - 10:15am	PLS 1168	Discussion
0102	Logan Williams	Seats (Total: 16)	
	Tu 9:30am - 10:45am	ESJ 1202	
	Th 9:30am - 10:20am	ESJ 1202	
	F 10:30am - 11:45am	PLS 1168	Discussion
0103	Logan Williams	Seats (Total: 16)	
	Tu 9:30am - 10:45am	ESJ 1202	
	Th 9:30am - 10:20am	ESJ 1202	
	F 12:00pm - 1:15pm	CHM 0122	Discussion
0104	Logan Williams	Seats (Total: 16)	
	Tu 9:30am - 10:45am	ESJ 1202	
	Th 9:30am - 10:20am	ESJ 1202	
	F 1:30pm - 2:45pm	PLS 1168	Discussion
0105	Logan Williams	Seats (Total: 16)	
	Tu 9:30am - 10:45am	ESJ 1202	
	Th 9:30am - 10:20am	ESJ 1202	
	F 3:00pm - 4:15pm	PLS 1168	Discussion
0201	Nicole Mogul	Seats (Total: 16)	
	Tu 3:30pm - 4:45pm	ESJ 0215	
	Th 3:30pm - 4:20pm	ESJ 0215	
	F 9:00am - 10:15am	CHM 0127	Discussion

0202	Nicole Mogul	Seats (Total: 16)		
	Tu 3:30pm - 4:45pm	ESJ 0215		
	Th 3:30pm - 4:20pm	ESJ 0215		
	F 10:30am - 11:45am	CHM 0127	Discussion	
0203	Nicole Mogul	Seats (Total: 16)		
	Tu 3:30pm - 4:45pm	ESJ 0215		
	Th 3:30pm - 4:20pm	ESJ 0215		
	F 12:00pm - 1:15pm	CHM 0127	Discussion	
0204	Nicole Mogul	Seats (Total: 16)		
	Tu 3:30pm - 4:45pm	ESJ 0215		
	Th 3:30pm - 4:20pm	ESJ 0215		
	F 1:30pm - 2:45pm	CHM 0127	Discussion	
0205	Nicole Mogul	Seats (Total: 14)		
	Tu 3:30pm - 4:45pm	ESJ 0215		
	Th 3:30pm - 4:20pm	ESJ 0215		
	F 3:00pm - 4:15pm	CHM 0127	Discussion	

ENEE205

Electric Circuits

(Perm req)

Credits: 4

Grading Method: Regular

Prerequisite: Minimum grade of C- in PHYS260; and minimum grade of C- in PHYS261; and permission of ENGR-Electrical & Computer Engineering department. Corequisite: MATH246. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical). Credit only granted for: ENEE204 or ENEE205. Formerly: ENEE204.

Design, analysis, simulation, construction and evaluation of electric circuits. Terminal Relationships. Kirchoff's laws. DC and AC steady state analysis. Node and mesh methods. Thevenin and Norton equivalent circuits. Transient behavior of first- and second-order circuits. Frequency response and transfer functions. Ideal op-amp circuits. Diode and transistor circuits.

0101	Thomas Murphy	Seats (Total: 12)		
	MW 2:00pm - 3:15pm	KEB 1200		
	Tu 12:00pm - 1:50pm	AVW 1356	Lab	
	Tu 11:00am - 11:50am	AVW 1356	Discussion	
0102	Thomas Murphy	Seats (Total: 12)		
	MW 2:00pm - 3:15pm	KEB 1200		
	Tu 9:00am - 10:50am	AVW 1356	Lab	
	Tu 8:00am - 8:50am	AVW 1356	Discussion	

0103	Thomas Murphy MW 2:00pm - 3:15pm Th 12:00pm - 1:50pm Th 11:00am - 11:50am	Seats (Total: 12) KEB 1200 AVW 1356 AVW 1356	Lab Discussion
0104	Thomas Murphy MW 2:00pm - 3:15pm Th 9:00am - 10:50am Th 8:00am - 8:50am	Seats (Total: 12) KEB 1200 AVW 1356 AVW 1356	Lab Discussion
0105	Thomas Murphy MW 2:00pm - 3:15pm W 12:00pm - 1:50pm W 11:00am - 11:50am	Seats (Total: 12) KEB 1200 AVW 1356 AVW 1356	Lab Discussion
0201	Romel Gomez TuTh 9:30am - 10:45am M 12:00pm - 1:50pm M 11:00am - 11:50am	Seats (Total: 12) EGR 0108 AVW 1356 AVW 1356	Lab Discussion
0202	Romel Gomez TuTh 9:30am - 10:45am M 3:00pm - 4:50pm M 2:00pm - 2:50pm	Seats (Total: 12) EGR 0108 AVW 1356 AVW 1356	Lab Discussion
0203	Romel Gomez TuTh 9:30am - 10:45am W 3:00pm - 4:50pm W 2:00pm - 2:50pm	Seats (Total: 12) EGR 0108 AVW 1356 AVW 1356	Lab Discussion
0204	Romel Gomez TuTh 9:30am - 10:45am F 9:00am - 10:50am F 8:00am - 8:50am	Seats (Total: 12) EGR 0108 AVW 1356 AVW 1356	Lab Discussion
0205	Romel Gomez TuTh 9:30am - 10:45am M 9:00am - 10:50am M 8:00am - 8:50am	Seats (Total: 12) EGR 0108 AVW 1356 AVW 1356	Lab Discussion

(Perm req)

Credits: 4

Grading Method: Regular

Prerequisite: Minimum grade of C- in MATH141; and permission of ENGR-Electrical & Computer Engineering department. And minimum grade of C- in ENEE140; or minimum grade of C- in CMSC131. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer). Credit only granted for: ENEE222, ENEE241, or MATH242. Formerly: ENEE241.

Discrete-time and continuous-time signals, sampling. Linear transformers, orthogonal projections. Discrete Fourier Transform and its properties. Fourier Series. Introduction to discrete-time linear filters in both time and frequency domains.

0101	Eyad Abed	Seats (Total: 28)		
	MW 11:00am - 12:15pm	CHE 2110		
	Tu 9:00am - 9:50am	KEB 2107	Lab	
	Th 9:00am - 9:50am	KEB 2107	Discussion	
0102	Eyad Abed	Seats (Total: 28)		
	MW 11:00am - 12:15pm	CHE 2110		
	Tu 10:00am - 10:50am	KEB 2107	Lab	
	Th 10:00am - 10:50am	KEB 2107	Discussion	
0201	Adrianos Papamarcou	Seats (Total: 28)		
	TuTh 12:30pm - 1:45pm	CSI 3117		
	W 9:00am - 9:50am	KEB 2107	Lab	
	F 9:00am - 9:50am	KEB 2107	Discussion	
0202	Adrianos Papamarcou	Seats (Total: 28)		
	TuTh 12:30pm - 1:45pm	CSI 3117		
	W 10:00am - 10:50am	KEB 2107	Lab	
	F 10:00am - 10:50am	KEB 2107	Discussion	

ENEE244

Digital Logic Design

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in CMSC132 or ENEE150; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Sophomore standing or higher; and must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

The design and analysis of combinational and synchronous sequential systems comprising digital logic gates and flip-flop memory devices; underlying tools such as switching and Boolean algebras and Karnaugh map simplification of gate networks; design and use of decoders, multiplexers, encoders, adders, registers, counters, sequence recognizers, programmable logic arrays (PLAs), read-only memories (ROMs, PROMs), and similar devices. Arbitrary radix conversion.

Engineering College only (04).

0101	Manoj Franklin MW 12:30pm - 1:45pm Th 8:00am - 8:50am	Seats (Total: 13) KEB 1110 CHE 2116	Discussion
0102	Manoj Franklin MW 12:30pm - 1:45pm Th 10:00am - 10:50am	Seats (Total: 13) KEB 1110 CHE 2116	Discussion
0103	Manoj Franklin MW 12:30pm - 1:45pm Th 3:00pm - 3:50pm	Seats (Total: 13) KEB 1110 EGR 3111	Discussion
0104	Manoj Franklin MW 12:30pm - 1:45pm Th 4:00pm - 4:50pm	Seats (Total: 13) KEB 1110 EGR 3111	Discussion
0105	Manoj Franklin MW 12:30pm - 1:45pm Th 9:00am - 9:50am	Seats (Total: 13) KEB 1110 CHE 2116	Discussion
0106	Manoj Franklin MW 12:30pm - 1:45pm Th 11:00am - 11:50am	Seats (Total: 13) KEB 1110 PLS 1158	Discussion
0201	Jerry Wu TuTh 2:00pm - 3:15pm M 9:00am - 9:50am	Seats (Total: 13) JMP 3201 EGR 3111	Discussion
0202	Jerry Wu TuTh 2:00pm - 3:15pm M 10:00am - 10:50am	Seats (Total: 13) JMP 3201 EGR 3111	Discussion
0203	Jerry Wu TuTh 2:00pm - 3:15pm M 11:00am - 11:50am	Seats (Total: 13) JMP 3201 EGR 3111	Discussion
0204	Jerry Wu TuTh 2:00pm - 3:15pm M 12:00pm - 12:50pm	Seats (Total: 13) JMP 3201 EGR 3111	Discussion

0205	Jerry Wu	Seats (Total: 13)	
	TuTh 2:00pm - 3:15pm	JMP 3201	
	M 1:00pm - 1:50pm	EGR 3111	Discussion
0206	Jerry Wu	Seats (Total: 13)	
	TuTh 2:00pm - 3:15pm	JMP 3201	
	M 2:00pm - 2:50pm	EGR 3111	Discussion

ENEE245

Digital Circuits and Systems Laboratory

(Perm req)

Credits: 2

Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE244. And minimum grade of C- in ENEE150; or minimum grade of C- in CMSC132. And permission of ENGR-Electrical & Computer Engineering department.
Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer).

Introduction to basic measurement techniques and electrical laboratory equipment (power supplies, oscilloscopes, voltmeters, etc.). Design, construction, and characterization of digital circuits containing logic gates, sequential elements, oscillators, and digital integrated circuits. Introduction to digital design and simulation with the Verilog Hardware Description Language (HDL).

0101	Manoj Franklin	Seats (Total: 12)	
	M 10:00am - 10:50am	CSI 1115	
	M 2:00pm - 4:50pm	AVW 1324	Lab
0102	Manoj Franklin	Seats (Total: 12)	
	M 10:00am - 10:50am	CSI 1115	
	Tu 8:00am - 10:50am	AVW 1324	Lab
0103	Manoj Franklin	Seats (Total: 12)	
	M 10:00am - 10:50am	CSI 1115	
	W 11:00am - 1:50pm	AVW 1324	Lab
0104	Manoj Franklin	Seats (Total: 12)	
	M 10:00am - 10:50am	CSI 1115	
	Th 11:00am - 1:50pm	AVW 1324	Lab
0105	Manoj Franklin	Seats (Total: 12)	
	M 10:00am - 10:50am	CSI 1115	
	F 2:00pm - 4:50pm	AVW 1324	Lab

0106	Manoj Franklin M 10:00am - 10:50am Tu 2:00pm - 4:50pm	Seats (Total: 12) CSI 1115 AVW 1324 Lab
0107	Manoj Franklin M 10:00am - 10:50am Tu 11:00am - 1:50pm	Seats (Total: 12) CSI 1115 AVW 1324 Lab
0108	Manoj Franklin M 10:00am - 10:50am W 8:00am - 10:50am	Seats (Total: 12) CSI 1115 AVW 1324 Lab

ENEE303

Analog and Digital Electronics

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer).

Conceptual operation of transistors and diodes. Large and small signal operation of BJTs and MOSFETs. Basic transistor configurations. Logic circuits and semiconductor memory. Multi-transistor circuits including differential amplifiers and current mirrors. Frequency response.

0101	Timothy Horiuchi MW 9:30am - 10:45am F 9:00am - 9:50am	Seats (Total: 25) EGR 0108 EGR 1102 Discussion
0102	Timothy Horiuchi MW 9:30am - 10:45am F 10:00am - 10:50am	Seats (Total: 25) EGR 0108 EGR 1102 Discussion
0201	Martin Peckerar TuTh 9:30am - 10:45am F 12:00pm - 12:50pm	Seats (Total: 25) EGR 1108 EGR 3114 Discussion
0202	Martin Peckerar TuTh 9:30am - 10:45am F 1:00pm - 1:50pm	Seats (Total: 25) EGR 1108 EGR 1102 Discussion
0301	Danilo Romero TuTh 12:30pm - 1:45pm M 8:00am - 8:50am	Seats (Total: 25) EGR 0108 EGR 3102 Discussion

0302	Danilo Romero	Seats (Total: 25)	
	TuTh 12:30pm - 1:45pm	EGR 0108	
	M 9:00am - 9:50am	EGR 3102	Discussion

ENEE303H Analog and Digital Electronics

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer).

Conceptual operation of transistors and diodes. Large and small signal operation of BJTs and MOSFETs. Basic transistor configurations. Logic circuits and semiconductor memory. Multi-transistor circuits including differential amplifiers and current mirrors. Frequency response.

0101	Danilo Romero	Seats (Total: 15)	
	TuTh 12:30pm - 1:45pm	EGR 0108	
	W 10:00am - 10:50am	EGR 3102	Discussion

ENEE307 Electronic Circuits Design Laboratory

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE303; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

Students will design and test analog and digital circuits at the transistor level. FETs and BJTs will be covered. The laboratory experiments will be tightly coordinated with ENEE303 materials.

0102	Neil Goldsman	Seats (Total: 12)	
	W 10:00am - 10:50am	CSI 1115	
	M 11:00am - 2:00pm	AVW 1330	Lab
0103	Neil Goldsman	Seats (Total: 12)	
	W 10:00am - 10:50am	CSI 1115	
	M 2:00pm - 5:00pm	AVW 1330	Lab
0106	Neil Goldsman	Seats (Total: 12)	
	W 10:00am - 10:50am	CSI 1115	
	F 8:00am - 11:00am	AVW 1330	Lab

0107	Neil Goldsman W 10:00am - 10:50am F 11:00am - 2:00pm	Seats (Total: 12) CSI 1115 AVW 1330	Lab
0108	Neil Goldsman W 10:00am - 10:50am W 2:00pm - 5:00pm	Seats (Total: 12) CSI 1115 AVW 1330	Lab
0109	Neil Goldsman W 10:00am - 10:50am Th 2:00pm - 5:00pm	Seats (Total: 12) CSI 1115 AVW 1330	Lab
0110	Neil Goldsman W 10:00am - 10:50am Tu 2:00pm - 5:00pm	Seats (Total: 12) CSI 1115 AVW 1330	Lab

ENEE313

Introduction to Device Physics

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer). Credit only granted for: ENEE312 or ENEE313.

Basic physics of devices including fields in solids, crystal structure, properties of electrons and holes. Current flow in Si using drift-diffusion model. Properties of the pn junction. Properties of devices including BJTs, FETs and their physical characteristics.

0101	Agisilaos Iliadis MW 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 25) CSI 3117 CHE 2145	Discussion
0102	Agisilaos Iliadis MW 11:00am - 12:15pm F 11:00am - 11:50am	Seats (Total: 25) CSI 3117 CHE 2145	Discussion

ENEE322

Signal and System Theory

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: Minimum grade of C- in MATH246; and minimum grade of C- in ENEE222; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

Concept of linear systems, state space equations for continuous systems, time and frequency domain analysis of signals and linear systems. Fourier, Laplace and Z transforms. Application of theory to problems in electrical engineering.

ENEE majors (09090) only.

0101	Gilmer Blankenship MW 2:00pm - 3:15pm F 8:00am - 8:50am	Seats (Total: 25) EGR 0108 EGR 2116	Discussion
0102	Gilmer Blankenship MW 2:00pm - 3:15pm F 9:00am - 9:50am	Seats (Total: 25) EGR 0108 EGR 2116	Discussion
0201	Adrianos Papamarcou TuTh 9:30am - 10:45am W 8:00am - 8:50am	Seats (Total: 25) JMP 2121 EGR 1102	Discussion
0202	Adrianos Papamarcou TuTh 9:30am - 10:45am W 9:00am - 9:50am	Seats (Total: 25) JMP 2121 EGR 1102	Discussion
0301	Prakash Narayan TuTh 3:30pm - 4:45pm M 8:00am - 8:50am	Seats (Total: 25) CSI 2117 EGR 2154	Discussion
0302	Prakash Narayan TuTh 3:30pm - 4:45pm M 9:00am - 9:50am	Seats (Total: 25) CSI 2117 EGR 2154	Discussion

ENEE322H

Signal and System Theory

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: Minimum grade of C- in MATH246; and minimum grade of C- in ENEE222; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

Concept of linear systems, state space equations for continuous systems, time and frequency domain analysis of signals and linear systems. Fourier, Laplace and Z transforms. Application of theory to problems in electrical engineering.

0101	Andre Tits	Seats (Total: 18)	
	TuTh 3:30pm - 4:45pm	EGR 2116	
	M 11:00am - 11:50am	EGR 3114	Discussion

ENEE324 Engineering Probability

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in MATH246 and ENEE222; and permission of ENGR-Electrical & Computer Engineering department. Credit only granted for: BMGT231, STAT400 or ENEE324.

Additional information: Electrical Engineering majors may NOT substitute STAT400 for ENEE324.

Axioms of probability; conditional probability and Bayes' rules; random variables, probability distribution and densities: functions of random variables: weak law of large numbers and central limit theorem. Introduction to random processes; correlation functions, spectral densities, and linear systems. Applications to noise in electrical systems, filtering of signals from noise, estimation, and digital communications.

ENEE majors (09090) only.

0101	Anthony Ephremides	Seats (Total: 25)	
	MW 9:30am - 10:45am	KEB 1110	
	F 8:00am - 8:50am	EGR 3114	Discussion
0102	Anthony Ephremides	Seats (Total: 25)	
	MW 9:30am - 10:45am	KEB 1110	
	F 9:00am - 9:50am	MTH 1311	Discussion
0201	Mark Shayman	Seats (Total: 25)	
	TuTh 12:30pm - 1:45pm	KEB 1110	
	W 8:00am - 8:50am	EGR 2116	Discussion
0202	Mark Shayman	Seats (Total: 25)	
	TuTh 12:30pm - 1:45pm	KEB 1110	
	W 9:00am - 9:50am	EGR 2116	Discussion

ENEE350 Computer Organization

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE244; and 1 course with a minimum grade of C- from (ENEE150, CMSC132); and permission of ENGR-Electrical & Computer Engineering department.

Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical). Formerly: ENEE250.

Structure and organization of digital computers. Registers, memory, control and I/O. Data and instruction formats, addressing modes, assembly language programming. Elements of system software, subroutines and their linkages.

ENEE majors (09090) only

0101	Charles Silio MW 11:00am - 12:15pm F 12:00pm - 12:50pm	Seats (Total: 25) KEB 1110 EGR 1102	Discussion
0102	Charles Silio MW 11:00am - 12:15pm F 1:00pm - 1:50pm	Seats (Total: 25) KEB 1110 EGR 3102	Discussion
0201	Yavuz Oruc TuTh 12:30pm - 1:45pm W 11:00am - 11:50am	Seats (Total: 25) JMP 3201 CHM 0124	Discussion
0202	Yavuz Oruc TuTh 12:30pm - 1:45pm W 12:00pm - 12:50pm	Seats (Total: 25) JMP 3201 CHM 0124	Discussion
0301	Rajeev Barua MW 2:00pm - 3:15pm F 12:00pm - 12:50pm	Seats (Total: 20) CSI 2117 EGR 1110	Discussion
0302	Rajeev Barua MW 2:00pm - 3:15pm F 1:00pm - 1:50pm	Seats (Total: 20) CSI 2117 CHE 2116	Discussion

ENEE350H

Computer Organization

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE244; and 1 course with a minimum grade of C- from (ENEE150, CMSC132); and permission of ENGR-Electrical & Computer Engineering department.

Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical). Formerly: ENEE250.

Structure and organization of digital computers. Registers, memory, control and I/O. Data and instruction formats, addressing modes, assembly language programming. Elements of system software, subroutines and their linkages.

For general honors students only.

0101	Rajeev Barua	Seats (Total: 15)	
	MW 2:00pm - 3:15pm	CSI 2117	
	F 2:00pm - 2:50pm	EGR 3111	Discussion

ENEE380 Electromagnetic Theory

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; and minimum grade of C- in MATH241, PHYS270, and PHYS271; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in Engineering: Electrical program.

Introduction to electromagnetic fields. Coulomb's law, Gauss's law, electrical potential, dielectric materials capacitance, boundary value problems, Biot-Savart law, Ampere's law, Lorentz force equation, magnetic materials, magnetic circuits, inductance, time varying fields and Maxwell's equations.

ENEE majors (09090) only.

0101	Wesley Lawson	Seats (Total: 25)	
	MW 12:30pm - 1:45pm	EGR 1108	
	Tu 11:00am - 11:50am	EGR 1102	Discussion
0102	Wesley Lawson	Seats (Total: 25)	
	MW 12:30pm - 1:45pm	EGR 1108	
	Tu 12:00pm - 12:50pm	EGR 1102	Discussion
0201	Yanne Chembo	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm	CSI 3118	
	W 4:00pm - 4:50pm	CHM 0122	Discussion

ENEE380H Electromagnetic Theory

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; and minimum grade of C- in MATH241, PHYS270, and PHYS271; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in Engineering: Electrical program.

Introduction to electromagnetic fields. Coulomb's law, Gauss's law, electrical potential, dielectric materials capacitance, boundary value problems, Biot-Savart law, Ampere's law, Lorentz force equation, magnetic materials, magnetic circuits, inductance, time varying fields and Maxwell's equations.

0101	Wesley Lawson	Seats (Total: 20)	
	MW 12:30pm - 1:45pm	EGR 1108	
	W 11:00am - 11:50am	EGR 1102	Discussion

ENEE381 Electromagnetic Wave Propagation

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE380; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in Engineering: Electrical program.

The electromagnetic spectrum: Review of Maxwell's equations; the wave equation potentials, Poynting's theorem, relationship between circuit theory and fields; propagation of electromagnetic waves in homogeneous media and at interfaces; transmission line theory, waveguides, radiation and antennas.

ENEE majors only (09090).

0101	Julius Goldhar	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm	AJC 2121	
	F 2:00pm - 2:50pm	AJC 2134	Discussion
0102	Julius Goldhar	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm	AJC 2121	
	F 3:00pm - 3:50pm	AJC 2134	Discussion

ENEE407 Design & Testing of RF and Microwave Devices

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE381; and must have earned a minimum grade of regular (letter) C- in all required 200-level ENEE courses; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical) ; and permission of ENGR-Electrical & Computer Engineering department.

An introduction to state of the art design, and testing techniques of RF and microwave devices. Designs, simulations and layout of different devices are performed using the software package ADS (Advance Design System). The course highlights wide range of engineering applications including terrestrial microwave links, satellite communications, broadcasting, mobile communications and radar.

0101	Charles Turner	Seats (Total: 12)	
	Tu 11:00am - 11:50am	AVW 2446	
	Th 9:30am - 12:30pm	AVW 2446	Lab

ENEE408A Capstone Design Project:Microprocessor-Based Design

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: CS

Prerequisite: ENEE440 or permission of the instructor. This course provides a team-based experience in the design and implementation of a microprocessor-based system to solve a real-world problem. A product specification or client requirement forms the basis for the student teams development of an initial technical design specification. The team then divides into smaller groups for the parallel development of hardware and software subsystems of the product device. Upon completion and test of the various subsystems, software and hardware components are integrated into the system prototype and the system is tested and documented.

0101	William Hawkins	Seats (Total: 12)
	Th 9:30am - 10:20am	EGR 3114
	Contact instructor or department for details.	

ENEE408C Capstone Design Project: Modern Digital System Design

(Perm req)

Credits: 3

Grading Method: Regular

CORE: CS

Prerequisite: ENEE 350. A real-world digital system design experience that prepares students for careers in FPGA and ASIC design. Student teams use the Verilog hardware description language together with industry-standard simulation and synthesis tools to design medium-complexity digital chips that are ultimately configured and tested on FPGAs with real-world applications. Results from these projects will be presented through in-class presentations and written reports.

0101	Shuvra Bhattacharyya	Seats (Total: 16)
	Tu 3:30pm - 4:45pm	KEB 2107
	Th 2:00pm - 4:50pm	KEB 2107 Lab

ENEE408E Capstone Design Project: Optical System Design

(Perm req)

Credits: 3

Grading Method: Regular

CORE: CS

Prerequisite(s): ENEE 380. Corequisite(s): ENEE 381. The purpose of this course is to teach optical analysis and design techniques by reference to the performance of many different optical components and systems. Attention will be given to real world design in terms of component selection, optimization, and integration into systems

0101	Christopher Davis	Seats (Total: 30)
	MW 11:00am - 12:15pm	AJC 2132

ENEE408I Capstone Design Project: Autonomous Control of Interacting Robots

(Perm req)

Credits: 3

Grading Method: Regular

CORE: CS

Prerequisite: ENEE322; Electrical or Computer Engineering seniors in their last semester. Co-requisite: ENEE460 or ENEE463. The course involves students in the design, development, and application of autonomous robotic systems. The robots are 4 wheeled vehicles with on-board sensors (cameras, acoustic sensors), computers and wireless communications capabilities. The students work in teams to program the robots to accomplish a task individually and in teams of 2 or more robots. Applications vary from semester to semester, including racing with passing, soccer, search and identify.

0101	Gilmer Blankenship	Seats (Total: 15)		
	M 10:00am - 10:50am	EGR 2116		
	W 11:00am - 1:50pm	KEB 3209	Lab	

ENEE408K

Capstone Design Project; Electric Cars

(Perm req)

Credits: 3

Grading Method: Regular

Culmination of prior course work in electrical and computer engineering. Utilization of modern design tools and methodologies for the design of components or systems under realistic constraints, with particular emphasis on teamwork and oral/written communication. Areas in which projects are currently offered include: microprocessor-based systems, digital systems, VLSI design (both digital and mixed-signal), and optical systems.

Prerequisites: ENEE303, Electrical or Computer Engineering seniors in their last year of their program. Recommended co-requisite: ENEE476 or ENEE475. Restriction: Permission of Electrical & Computer Engineering. A capstone course on the design of electric cars, which will be designed with the objective to participate in the Formula SAE racing competition. This is a system level design course, which will eventually use a combination of off-the-shelf components. The major components inside the electric car include electric motor, power inverter, drive circuit, battery management system, sensors and encoders etc. This course will also discuss level simulation of electric vehicle along with the electrical components in Autonomie software.

0101	Alireza Khaligh	Seats (Total: 30)		
	M 12:00pm - 12:50pm	ATL 2428		
	W 11:00am - 1:50pm	ANS 0412	Lab	

ENEE411

Advanced Analog and Digital Electronics

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE303. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer) ; and must have permission of the department. Credit only granted for: ENEE411 or ENEE419A. Formerly: ENEE419A.

Examination of analog and digital device models for analysis, design, and simulation of transistor level electronic circuits, emphasizing Metal Oxide Silicon Field Effect Transistors (MOSFETs); fundamental single transistor configurations; frequency response, feedback, and stability of multi-transistor circuits, such as current mirrors, differential amplifiers, voltage references, operational amplifiers and data converters; complementary Metal Oxide Silicon (CMOS) implementations of static and clocked digital as well as mixed signal circuits.

0101	Pamela Abshire	Seats (Total: 30)
	MW 3:30pm - 4:45pm	EGR 0135

ENEE416 Integrated Circuit Fabrication Laboratory

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE303; and must have earned a minimum grade of regular (letter) C- in all required 200-level ENEE courses; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical). Formerly: ENEE419J.

Characterization of wafers and fabrication steps. Oxide growth, lithography, dopant diffusion, and metal deposition and patterning will be discussed in the lectures and carried out in the lab in fabricating NMOS transistor circuits. The transistor characteristics will be measured and related to the fabrication parameters.

0101	Kevin Daniels	Seats (Total: 5)
	Th 11:00am - 12:15pm	EGR 3114
	Tu 9:00am - 12:00pm	KEB 2300 Lab
0102	Kevin Daniels	Seats (Total: 5)
	Th 11:00am - 12:15pm	EGR 3114
	W 12:30pm - 3:30pm	KEB 2300 Lab
0103	Kevin Daniels	Seats (Total: 5)
	Th 11:00am - 12:15pm	EGR 3114
	M 12:30pm - 3:30pm	KEB 2300 Lab
0104	Kevin Daniels	Seats (Total: 5)
	Th 11:00am - 12:15pm	EGR 3114
	W 9:00am - 12:00pm	KEB 2300 Lab
0105	Kevin Daniels	Seats (Total: 5)
	Th 11:00am - 12:15pm	EGR 3114
	F 9:00am - 12:00pm	KEB 2300 Lab

ENEE420 Communication Systems

(Perm req)

Credits: 3 Grading Method: Regular

*Prerequisite: ENEE324; and completion of all lower-division technical courses in the EE curriculum.**Fourier series, Fourier transforms and linear system analysis; random signals, autocorrelation functions and power spectral densities; analog communication systems: amplitude modulation, single-sideband modulation, frequency and phase modulation, sampling theorem and pulse-amplitude modulation; digital communication systems pulse-code modulation, phase-shift keying, differential phase shift keying, frequency shift keying; performance of analog and digital communication systems in the presence of noise.*

ENEE majors (09090) only.

0101	Mark Shayman	Seats (Total: 30)
	TuTh 9:30am - 10:45am	AJC 2121

ENEE425 Digital Signal Processing

(Perm req)

Credits: 3 Grading Method: Regular

*Prerequisite: ENEE322; and completion of all lower-division technical courses in the EE curriculum.**Sampling as a modulation process; aliasing; the sampling theorem; the Z-transform and discrete-time system analysis; direct and computer-aided design of recursive and nonrecursive digital filters; the Discrete Fourier Transform (DFT) and Fast Fourier Transform (FFT); digital filtering using the FFT; analog-to-digital and digital-to analog conversion; effects of quantization and finite-word-length arithmetic.*

ENEE majors (09090) only.

0101	Carol Espy-Wilson	Seats (Total: 40)
	MW 11:00am - 12:15pm	EGR 0135

ENEE428 Communications Design Laboratory

(Perm req)

Credits: 2 Grading Method: Regular

EE capstone design course. Exploring the signal processing and communication systems theoretical concepts presented in ENEE 420 Communication Systems and ENEE 425 Digital Signal Processing by implementing them on actual DSP based hardware in real time.

Prerequisite: ENEE324; Corequisite: ENEE425 or ENEE420. This course explores the signal processing and communication system theoretical concepts presented in ENEE 322 Signals and Systems, ENEE 324 Engineering Probability, ENEE 420 Communication Systems, and ENEE 425 Digital Signal Processing by implementing them on actual hardware in real time. In the process, students gain experience using equipment commonly used in industry, such as, oscilloscopes, spectrum analyzers, error rate test sets, channel simulators, digital signal processors, analog-to-digital and digital-to-analog converters, and signal generators. The experiments are based on using a Texas Instruments TMS320C6713 DSP Starter Kit (DSK) stand-alone board that communicates with the PC through a USB port.

0101	Steven Tretter	Seats (Total: 8)	
	W 10:00am - 10:50am	AVW 1362	
	F 9:00am - 12:00pm	AVW 1362	Lab
0102	Steven Tretter	Seats (Total: 8)	
	W 10:00am - 10:50am	AVW 1362	
	W 2:00pm - 5:00pm	AVW 1362	Lab

ENEE429C Topics in Communications; Modern Communication Systems Design Laboratory

(Perm req)

Credits: 3 Grading Method: Regular

Selected topics of current importance in communications.

Prerequisites: Completion of ENEE324 with a "C-" or better. Co-requisite: ENEE420 or ENEE425.
 Restrictions: Permission of Department. Credit only granted for ENEE429C or ENEE428. Explores the theoretical concepts on signal processing and communication systems by implementing them on actual hardware in real time using DSP and software-defined radio (SDR). Analog communications and digital filter designs will be implemented using Texas Instruments TMS320C6713 DSP S tarter Kit (DSK). Digital communication systems will be implemented using Ettus Research s USRP B210 SDR Kit.

Contact department for information to register for this course.

ENEE439M Topics in Signal Processing; Machine Learning

(Perm req)

Credits: 3 Grading Method: Regular

Selected topics of current importance in signal processing.

Prerequisites: ENEE324 or STAT400, Programming skills in Matlab, C+, or Python. A broad introduction to machine learning and statistical pattern recognition. Topics include: Supervised learning (Bayesian learning and classifier, parametric/non-parametric learning, discriminant functions, support vector machines, neural networks, deep learning networks); Unsupervised learning (clustering, dimensionality reduction, autoencoders). The course will also discuss recent applications of machine learning, such as computer vision, data mining, autonomous navigation, and speech recognition.

0101	Min Wu	Seats (Total: 30)
	MW 12:30pm - 1:45pm	CSI 3117

ENEE440 Microprocessors

(Perm req)

Credits: 3 Grading Method: Regular

*Prerequisite: ENEE350; and completion of all lower division technical courses in the EE curriculum.
Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical).*

Microprocessor architectures, instruction sets, and applications. Bus structures, memory, I/O interfacing. Assembly language programming, LSI device configuration, and the embedding of microprocessors in systems.

ENEE majors only (09090).

0101	William Hawkins	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	EGR 3106

ENEE445 Computer Laboratory

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE205; or minimum grade of C- in ENEE206. And minimum grade of C- in ENEE350; and must have earned a minimum grade of regular (letter) C- in all 200-level ENEE courses; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

This laboratory course focuses on the hardware/software interface in computer systems. Hand-on experiments are used to teach design, construction, analysis, and measurement of both hardware and software for embedded systems. Projects emphasize using microcontrollers for control, sensing, and communication through various I/O devices.

0101	William Hawkins	Seats (Total: 12)
	Tu 12:30pm - 1:20pm	EGR 3114
	Th 2:00pm - 5:00pm	AVW 1424 Lab

ENEE446 Digital Computer Design

(Perm req)

Credits: 3 Grading Method: Regular

*Prerequisite: ENEE350; and completion of all lower-division technical courses in the EE curriculum.
Restriction: Permission of ENGR-Electrical & Computer Engineering department. Credit only granted for: ENEE446 or CMSC411.*

Hardware design of digital computers. Arithmetic and logic units, adders, multipliers and dividers. Floating-point arithmetic units. Bus and register structures. Control units, both hardwired and microprogrammed. Index registers, stacks, and other addressing schemes. Interrupts, DMA and interfacing.

ENEE majors (09090) only.

0101	Manoj Franklin	Seats (Total: 60)
	MW 2:00pm - 3:15pm	KEB 1110

ENEE456 Cryptography

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: (CMSC106, CMSC131, or ENEE150; or equivalent programming experience); and (2 courses from (CMSC330, CMSC351, ENEE324, or ENEE380); or any one of these courses and a 400-level MATH course, or two 400-level MATH courses). Or permission of instructor. Also offered as: CMSC456, MATH456. Credit only granted for: MATH456, CMSC456 or ENEE456.

The theory, application, and implementation of mathematical techniques used to secure modern communications. Topics include symmetric and public-key encryption, message integrity, hash functions, block-cipher design and analysis, number theory, and digital signatures.

0101	Lawrence Washington	Seats (Total: 78)
	TuTh 2:00pm - 3:15pm	CSI 3117
0201	William Gasarch	Seats (Total: 95)
	MW 2:00pm - 3:15pm	IRB 0318

ENEE457 Computer Systems Security

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE350; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Electrical; Engineering: Computer) ; and permission of ENGR-Electrical & Computer Engineering department. Credit only granted for: CMSC414, ENEE459C or ENEE457. Formerly: ENEE459C.

Theoretical and practical aspects of computer systems security. Topics covered include symmetric/asymmetric encryption, message authentication, digital signatures, access control, as well as network security, web security and cloud security. Students acquire tools necessary for designing secure computer systems and programs and for defending against malicious threats (e.g., viruses, worms, denial of service).

0101	Dana Dachman-Soled	Seats (Total: 60)
	MW 11:00am - 12:15pm	EGR 0108

ENEE459A Topics in Computer Engineering; CAD Tools

(Perm req)

Credits: 1 Grading Method: Regular

Selected topics of current importance in computer engineering.

Prerequisite: ENEE245. Verilog or VHDL hardware description languages (HDLs) and graphical printed circuit design CAD packages are used to create a digital system implemented on a printed circuit-board. A practical design for hardware incorporating a processor and interface devices is to be created by the student. Simulation is used to explore practical issues of system performance and device resource constraints, and a printed-circuit board proof-of-concept will be produced by the student.

0101	William Hawkins	Seats (Total: 12)
	Tu 9:30am - 10:20am	EGR 3114
	Contact instructor or department for details.	

ENEE459B Topics in Computer Engineering; Reverse Engineering and Hardware Security Laboratory

(Perm req)

Credits: 3 Grading Method: Regular

Selected topics of current importance in computer engineering.

Prerequisite: ENEE244, ENEE245, and ENEEE350 or permission of the instructor.

0101	Gang Qu	Seats (Total: 24)
	Tu 5:00pm - 6:15pm	KEB 1110
	Th 5:00pm - 7:00pm	AVW 2446 Lab
0102	Gang Qu	Seats (Total: 24)
	Tu 5:00pm - 6:15pm	KEB 1110
	W 5:00pm - 7:00pm	AVW 2446 Lab

ENEE459D Topics in Computer Engineering; Advanced Laboratory of Digital Systems Using SystemsVerilog

(Perm req)

Credits: 3 Grading Method: Regular

Selected topics of current importance in computer engineering.

Prerequisites: Completion of ENEE245 and ENEE350 with a "C-" or better. A project-oriented course that will cover the basics of verifying hardware description language (HDL) digital systems, from theory to industry practice. Laboratory exercises will deal with applications of the concepts taught, and these will be based on verification tools currently used in industry and SystemVerilog, a hardware description and hardware verification language. A GUI interface verification environment will be designed by using object-oriented programming language (C/C++).

0101	Jerry Wu	Seats (Total: 9)	
	Tu 12:30pm - 1:45pm	KEB 2107	
	F 11:00am - 1:50pm	KEB 2107	Lab

ENEE460 Control Systems

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENEE322; and completion of all lower-division technical courses in the EE curriculum. Restriction: Must be in Engineering: Electrical program.

Mathematical models for control system components. Transform and time domain methods for linear control systems. Introductory stability theory. Root locus, bode diagrams and Nyquist plots. Design specifications in the time and frequency domains. Compensation design in the time and frequency domain. Introduction to sampled data systems.

ENEE majors (09090) only.

0101	Richard La	Seats (Total: 30)	
	TuTh 11:00am - 12:15pm	CSI 2107	
	F 9:00am - 9:50am	CSI 2118	Discussion

ENEE469R Topics in Controls; Introduction to Robotics

Credits: 3 Grading Method: Regular

Selected topics of current importance in controls.

Prerequisites: ENEE322 and permission of ECE Department. Restriction: Permission of Electrical & Computer Engineering required. An introduction of basic principles for modeling a robot. Most of the course is focused on modeling manipulators based on serial mechanisms. The course begins with a description of the homogeneous transformation and rigid motions. It then introduces concepts related to kinematics, inverse kinematics, and Jacobians. This course then introduces Eulerian and Lagrangian Dynamics. Finally, the course concludes by introducing basic principles for modeling manipulators based on parallel mechanisms. The concepts introduced in this course are subsequently utilized in control and planning courses.

0101	William Levine	Seats (Total: 30)	
	MW 2:00pm - 3:15pm	AJC 2132	

ENEE474 Power Systems

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: ENEE322; and completion of all lower-division technical courses in the EE curriculum.

Interconnected power systems, transmission lines, load flow studies, unit commitment and economic dispatch. Three phase networks, machine models. Symmetrical components, fault analysis and unbalanced operation. Power system transients, stability and numerical methods in power system analysis.

0101	Isaak Mayergoyz	Seats (Total: 75)
	TuTh 2:00pm - 3:15pm	KEB 1110

ENEE476 Renewable Energy

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: Minimum grade of C- in ENEE303; and completion of all lower-divisions ENEE courses with a C- or better. Restriction: Permission of ENGR-Electrical & Computer Engineering department; and must be in one of the following programs (Engineering: Electrical; Engineering: Computer). Credit only granted for: ENEE419R or ENEE476. Formerly: ENEE419R.

Solar Energy Conversion Systems: History of Photovoltaic (PV) Systems, PV Cell, Module and Array Models and Equivalent Circuits, Characteristic Resistance, Fill Factor, Effects of Parasitic Resistances, Mismatch Effects, Shading, Bypass Diodes, Sun Tracking Systems, Maximum Power Point Tracking (MPPT) Techniques, Isolated and Non-isolated Switch-mode DC/DC for PV Systems, Inverter Design and Control, Sizing the PV Panel and Battery Pack in PV Applications. Wind Energy Conversion Systems: Introduction to Wind Energy Harvesting, Horizontal and Vertical Wind Systems, Fundamentals of Wind Energy Harvesting Systems, Variable Speed and Fixed Speed Wind Energy Conversion Systems (WECS), Wind Turbines and Different Electrical Machines in Wind Applications, Induction Machine and Dynamic Model of Induction Machines, Synchronous Generators and Dynamic Model of SG, Control of Wind Energy Conversion Systems.

0101	Alireza Khaligh	Seats (Total: 60)
	MW 3:30pm - 4:45pm	EGR 1108

ENEE486 Optoelectronics Lab

Credits: 2

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ENEE205; or minimum grade of C- in ENEE206. And minimum grade of C- in PHYS271 and PHYS270; and must have earned a minimum grade of regular (letter) C- in all required 200-level ENEE courses; and permission of ENGR-Electrical & Computer Engineering department. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical).

Hands-on experience in performing measurements in optics and electro-optics. Basics of optics, light detectors, Fourier optics, gratings and spectrometers, pulsed dye lasers, fiber optics, electro-optics, and acousto-optics.

0101	Mario Dagenais	Seats (Total: 7)	
	W 10:00am - 10:50am	AJC 2134	
	W 2:00pm - 5:00pm	AVW 1366	Lab

ENEE488

(Perm req)

Independent Study in Electrical and Computer Engineering

Credits: 1-3 Grading Method: Regular

The purpose is to provide students with an opportunity for independent study projects on advanced electrical and computer engineering topics. These projects typically involve academic investigations of technical themes that are not addressed in the established elective and special topics courses taught by the department on a regular basis. Study plans are tailored to students educational goals but are approved and supervised by faculty.

Prerequisite: permission of department.

1201	Romel Gomez	Seats (Total: 5)	
	Contact instructor or department for details.		
1301	Perinkulam Krishnaprasad	Seats (Total: 3)	
	Contact instructor or department for details.		
1501	William Levine	Seats (Total: 3)	
	Contact instructor or department for details.		
1801	Robert Newcomb	Seats (Total: 3)	
	Contact instructor or department for details.		
2801	Donald Yeung	Seats (Total: 3)	
	Contact instructor or department for details.		
5301	Julius Goldhar	Seats (Total: 5)	
	Contact instructor or department for details.		

5601	Jonathan Simon	Seats (Total: 10)
	Contact instructor or department for details.	
6101	Howard Milchberg	Seats (Total: 10)
	Contact instructor or department for details.	
6501	Yasser Shoukry	Seats (Total: 5)
	Contact instructor or department for details.	
6901	Neil Goldsman	Seats (Total: 3)
	Contact instructor or department for details.	
7001	Wesley Lawson	Seats (Total: 5)
	Contact instructor or department for details.	
9801	Jeremy Munday	Seats (Total: 10)
	Contact instructor or department for details.	

ENEE489N Topics in Electrophysics; Antenna Design

(Perm req)

Credits: 3 Grading Method: Regular

Selected topics of current importance in electrophysics.

Prerequisites: ENEE381. Restriction: Permission of Electrical & Computer Engineering Department. A senior level hands-on course to expose students to the principles of antenna design and methods for generation and reception of GHz signals. The course includes theory and computer modeling, as well as fabrication and testing of small scale antennas used in naval communication systems. The course builds upon the concepts of electromagnetic wave introduced in ENEE381. Students will learn the state of the art in microwave instrumentation and techniques, along with simulation tools based on geometry. Students will analyze and test several prototype antenna configurations.

Contact department for information to register for this course.

ENEE490 Physical Principles of Wireless Communications

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: ENEE381. Restriction: Must be in one of the following programs (Engineering: Computer; Engineering: Electrical). Credit only granted for: ENEE490 or ENEE498B. Formerly: ENEE498B.

0101	Wesley Lawson	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	CSI 3118

ENEE498M Topics in Electrical Engineering; Mathematical Methods in Electrical Engineering

(Perm req)

Credits: 3

Grading Method: Regular

Selected topics of current importance in electrical engineering.

Prerequisite: Completion of MATH241 with a "C-" or better; completion of all 200-level ENEE courses. A fundamental understanding of applied mathematical techniques that are essential for solving problems in various fields of electrical and computer engineering. The topics that will be covered are complex variables/analysis, linear algebra, Laplace and Fourier transforms, discrete math, and differential equations. The emphasis is on the application of these mathematical tools to problems that students encounter in the upper-division electrical and computer engineering courses. Computational tools such as Wolfram Alpha and MATLAB will be introduced.

0101	Danilo Romero	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	EGR 2116

ENEE499

Senior Projects in Electrical and Computer Engineering

(Perm req)

Credits: 1-5

Grading Method: Regular

The purpose is to provide students with an opportunity to engage in independent research projects on advanced electrical and computer engineering topics. Projects are selected by students and supervised by faculty and other qualified mentors. While students may be required to acquire new skills or information in the course of completing a 499 project, the focus is to conduct an independent investigation of a technical theme by the student. The project may be used to satisfy the advanced lab requirement if it is approved as a primarily - experimental research project. In that case, the student will enroll in ENEE499L.

ENEE majors (09090) only.

Contact department for information to register for this course.

ENEE499L

Senior Projects in Electrical and Computer Engineering

(Perm req)

Credits: 1-3

Grading Method: Regular

The purpose is to provide students with an opportunity to engage in independent research projects on advanced electrical and computer engineering topics. Projects are selected by students and supervised by faculty and other qualified mentors. While students may be required to acquire new skills or information in the course of completing a 499 project, the focus is to conduct an independent investigation of a technical theme by the student. The project may be used to satisfy the advanced lab requirement if it is approved as a primarily - experimental research project. In that case, the student will enroll in ENEE499L.

Contact department for information to register for this course.

ENEE499R

Senior Projects in Electrical and Computer Engineering

(Perm req)

Credits: 1-3

Grading Method: Regular

Contact department for information to register for this course.

0101	Agisilaos Iliadis	Seats (Total: 25)
	MW 2:00pm - 3:15pm	EGR 1104

0101	Robert Newcomb	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	CSI 2107

Recommended: ENEE611.

This course will give students the knowledge required to analyze, design and lay-out discrete and integrated circuits used in modern radio frequency communications. The course will focus on advanced amplifier concepts, frequency conversion, tuning, and low-noise techniques. Implementation of AM, FM and digital modulation techniques will be covered. Emphasis will be given to CMOS technology as applied to analog VLSI. Advanced applications of SPICE and VLSI design layout tools will be covered.

0101	Neil Goldsman	Seats (Total: 25)
	MW 12:30pm - 1:45pm	AJC 2132

ENEE620 Random Processes in Communication and Control

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENEE324; or students who have taken courses with comparable content may contact the department.

Introduction to random processes: characterization, classification, representation; Gaussian and other examples. Linear operations on random processes, stationary processes: covariance function and spectral density. Linear least square waveform estimating Wiener-Kolmogoroff filtering, Kalman-Bucy recursive filtering: function space characterization, non-linear operations on random processes.

0101	Behtash Babadi	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	CHE 2108
	F 11:00am - 11:50am	CSI 2118 Discussion
0102	Behtash Babadi	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	CHE 2108
	Th 5:00pm - 5:50pm	CSI 3118 Discussion

ENEE630 Advanced Digital Signal Processing

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENEE425. Corequisite: ENEE620. Credit only granted for: ENEE624 or ENEE630. Formerly: ENEE624.

This is the first-year graduate course in signal processing. The objective is to establish fundamental concepts of signal processing on multirate processing, parametric modeling, linear prediction theory, modern spectral estimation, and high-resolution techniques.

0101	KJ Ray Liu	Seats (Total: 40)
	MW 3:30pm - 4:45pm	AJC 2132
	Tu 5:00pm - 5:50pm	AJC 2121 Discussion

ENEE633 Statistical Pattern Recognition

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: MATH461; or students who have taken courses with comparable content may contact the department; or permission of instructor. Corequisite: ENEE620; or permission of instructor. Credit only granted for: ENEE633 or ENEE739Q. Formerly: ENEE739Q.

The goal is to introduce mathematical pattern analysis and recognition. Emphasis is given to parametric and non-parametric statistical pattern recognition methods and clustering with applications to speech, image and video recognition.

0101	Ramalingam Chellappa	Seats (Total: 85)
	MW 11:00am - 12:15pm	CSI 1115

ENEE641 Mathematical Foundations for Computer Engineering

Credits: 3 Grading Method: Regular,
 Audit

Credit only granted for: ENEE641 or ENEE759F. Formerly: ENEE759F.

Mathematical modeling, design, analysis and proof techniques related to computer engineering. Probability, logic, combinatorics, set theory, and graph theory, as they pertain to the design and performance of computer engineering systems. Techniques for the design and analysis of efficient computational methods from graph theory and networks. Understanding of the limits on the efficiency of such computational methods. Translation from mathematical theory to actual programming. The course emphasizes mathematical rigor.

0101	Uzi Vishkin	Seats (Total: 50)
	MW 12:30pm - 1:45pm	PHY 1204

ENEE646 Digital Computer Design

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: ENEE446; or students who have taken courses with comparable content may contact the department.

Concepts and techniques for design of computer systems with improved performance. Advanced I/O systems, memory organization, pipelined and parallel processors, bus bandwidth, processor/memory interconnections, cache memory, virtual memory, multiprocessors, performance evaluation.

0101	Yavuz Oruc	Seats (Total: 35)
	TuTh 9:30am - 10:45am	AJC 2119

ENEE648D Advanced Topics in Electrical Engineering; Optoelectronics Lab

Credits: 3 Grading Method: Regular,
Audit

Every semester courses intended for high degree of specialization are offered by visiting or regular electrical engineering faculty members in two or more of the areas listed in 488. The student should check with the electrical engineering office of graduate studies for a list and the description of the topics offered currently.

Prerequisites: Permission of ENGR-Electrical & Computer Engineering department. Hands-on experience in performing measurements in optics and electro-optics. Basics of optics, light detectors, Fourier optics, gratings and spectrometers, pulsed dye lasers, fiber optics, electro-optics, and acousto-optics.

0101	Mario Dagenais	Seats (Total: 5)
	W 10:00am - 10:50am	AJC 2134
	W 2:00pm - 5:00pm	AVW 1366 Lab

ENEE657 Computer Security

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENEE457 or CMSC414; or students who have taken courses with comparable content may contact the department.

An introduction to the principles of building secure systems. Topics include operating system (OS) security, secure network communications, software security, real-world attacks, applied cryptography, and hardware security. Within these topics, the course emphasizes the cross-cutting concerns of attacks, defenses and measurement.

0101	Tudor Dumitras	Seats (Total: 40)
	MW 3:30pm - 4:45pm	CSI 3120

ENEE660 System Theory

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENEE460 and MATH463; or students who have taken courses with comparable content may contact the department.

General systems models. State variables and state space. Linearity and its implications. Controllability and observability. State space structure and representation. Realization theory and algorithmic solutions. Parameterizations of linear systems; canonical forms. Basic results from stability theory. Stabilizability. Fine structure of linear multivariable systems; minimal indices and polynomial matrices. Interplay between frequency domain and state space.

0101	Nuno Martins	Seats (Total: 30)
	MW 9:30am - 10:45am	AJC 2119

ENEE662 Convex Optimization

Credits: 3 Grading Method: Regular,
Audit

Recommended: MATH410. Credit only granted for: ENEE759F or ENEE662.

Focuses on recognizing, solving, and analyzing convex optimization problems. Convex sets, convex functions, convex and quasi-convex optimization problems. Duality theory and optimality conditions. Specific classes of problems including linear optimization (LP), semi-definite optimization (SDP), geometric programming. Algorithms for unconstrained and constrained optimization; interior-point methods. Applications in controls, communications, signal processing, statistics, and other areas.

0101	John Baras	Seats (Total: 40)
	MW 2:00pm - 3:15pm	AJC 2121

ENEE680 Electromagnetic Theory I

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENEE381; or students who have taken courses with comparable content may contact the department.

Theoretical analysis and engineering applications of Maxwell's equations. Boundary value problems of electrostatics and magnetostatics.

0101	Phillip Sprangle	Seats (Total: 25)
	MW 3:30pm - 4:45pm	EGR 2116

ENEE690 Quantum and Wave Phenomena with Electrical Application

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENEE381; or students who have taken courses with comparable content may contact the department.

Introduction of quantum and wave phenomena from electrical engineering point of view. Topics included: general principles of quantum mechanics, operator algebra, the microwave resonant cavity and the analagous potential well problem, harmonic oscillator, hydrogenic atom. Perturbation method applied to the transmission line and potential well problems. Periodically loaded transmission line and Kronig-Penny model of band theory.

0101	Howard Milchberg	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	AJC 2119

ENEE698E Graduate Seminar; Microelectronics

Credits: 1-2 Grading Method: Regular,
Audit, Sat-Fail

Every semester regular seminars are held in electrical science and in the six areas of specialization offered by the electrical engineering department. They may be taken, by arrangement with the student's advisor, for repeated credit.

0101	Robert Newcomb	Seats (Total: 20)
	Tu 5:00pm - 5:50pm	EGR 1110

ENEE698Q Graduate Seminar; Colloquium Series

Credits: 1 Grading Method: Regular

Every semester regular seminars are held in electrical science and in the six areas of specialization offered by the electrical engineering department. They may be taken, by arrangement with the student's advisor, for repeated credit.

0101	Joseph JaJa	Seats (Total: 80)
	F 3:30pm - 4:30pm	KEB 1110

ENEE699 Independent Studies in Electrical Engineering

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

Supervised individual study or project, or supervised group study or project, at an advanced level, in electrical engineering.

Contact department for information to register for this course.

ENEE729P Advanced Topics in Communication; Modern Discrete Probability

Credits: 3 Grading Method: Regular,
Audit

Prerequisites: Knowledge of undergraduate probability theory on the level of STAT410. Recommended prerequisite- STAT600. A graduate-level introduction to probabilistic reasoning for discrete systems. The course will cover several foundational models and methods that are widely used in modern research of stochastic systems and phenomena. The models include random graphs, Markov chains and mixing times, and dynamics of graphical models.

0101	Alexander Barg	Seats (Total: 30)
	MW 12:30pm - 1:45pm	AJC 2121

ENEE759G Advanced Topics in Computer Engineering; Unsupervised Learning

Credits: 3 Grading Method: Regular,
 Audit

Topics, as announced every semester, from the field of computer engineering and its applications.

0101	Joseph JaJa	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	AJC 2119

ENEE765 Adaptive Control

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: ENEE660 and ENEE664; or students who have taken courses with comparable content may contact the department.

General principles of adaptive control. Self-tuning regulators and model reference adaptive systems. Theoretical issues: stability, convergence, and robustness. Practical issues: implementation, computation, auto-tuning, and other successful application. Alternatives to adaptive control.

0101	Perinkulam Krishnaprasad	Seats (Total: 25)
	TuTh 5:00pm - 6:15pm	AJC 2132
	W 5:00pm - 6:50pm	CSI 3118 Discussion

ENEE789O Advanced Topics in Electrophysics

Credits: 3 Grading Method: Regular,
 Audit

Topics selected, as announced every semester, from the field of electrophysics and its applications.

0101	Edward Ott	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	PHY 1219

ENEE799 Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Sat-Fail

Contact department for information to register for this course.**ENEE889 Teaching Workshop**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

Provide training in education for senior PhD students who contemplate an academic career, and give them the opportunity to gain some teaching experience. Emphasis is on issues that are of special importance in electrical and computer engineering education.

Contact department for information to register for this course.**ENEE898 Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular, Sat-Fail

Provide training in education for senior PhD students who contemplate an academic career, and give them the opportunity to gain some teaching experience. Emphasis is on issues that are of special importance in electrical and computer engineering education.

Contact department for information to register for this course.**ENEE899 Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

ENES Engineering Science Fall 2019

ENES100 Introduction to Engineering Design

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSSP

Corequisite: MATH140.

Students work as teams to design and build a product using computer software for word-processing, spreadsheet, CAD, and communication skills.

0101	Taylor Myers	Seats (Total: 35)
	MW 8:00am - 9:50am	JMP 1116
	Class time/details on ELMs	ONLINE
	Contact instructor or department for details.	

0301	Wesley Lawson MW 10:00am - 11:50am Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 37) JMP 1116 ONLINE
0302	W Ethan Eagle MW 10:00am - 11:50am Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 37) JMP 1215 ONLINE
0401	Isabel Lloyd TuTh 10:00am - 11:50am Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 36) JMP 1116 ONLINE
0402	Jackelyn Lopez Roshwalb TuTh 10:00am - 11:50am Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 36) JMP 1215 ONLINE
0501	Peter Sunderland MW 12:00pm - 1:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 33) JMP 1116 ONLINE
0502	Ted Baker MW 12:00pm - 1:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 33) JMP 1215 ONLINE
0601	Timothy Foecke TuTh 12:00pm - 1:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 34) JMP 1116 ONLINE
0602	Jackelyn Lopez Roshwalb TuTh 12:00pm - 1:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 37) JMP 1215 ONLINE
0701	Michael Galczynski MW 2:00pm - 3:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 37) JMP 1116 ONLINE

0702	Brian Danielak	Seats (Total: 34)
	MW 2:00pm - 3:50pm	JMP 1215
	Class time/details on ELMs	ONLINE
	Contact instructor or department for details.	
0801	Brian Danielak	Seats (Total: 37)
	TuTh 2:00pm - 3:50pm	JMP 1116
	Class time/details on ELMs	ONLINE
	Contact instructor or department for details.	

ENES100A

Introduction to Engineering Design

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSSP

Corequisite: MATH140.

Students work as teams to design and build a product using computer software for word-processing, spreadsheet, CAD, and communication skills.

Restriction: Permission of department.

0101	Taylor Myers	Seats (Total: 5)
	MW 8:00am - 9:50am	JMP 1116
	Class time/details on ELMs	ONLINE
	Contact instructor or department for details.	
0301	Wesley Lawson	Seats (Total: 3)
	MW 10:00am - 11:50am	JMP 1116
	Class time/details on ELMs	ONLINE
	Contact instructor or department for details.	
0302	W Ethan Eagle	Seats (Total: 3)
	MW 10:00am - 11:50am	JMP 1215
	Class time/details on ELMs	ONLINE
	Contact instructor or department for details.	
0401	Isabel Lloyd	Seats (Total: 4)
	TuTh 10:00am - 11:50am	JMP 1116
	Class time/details on ELMs	ONLINE
	Contact instructor or department for details.	

0402	Jackelyn Lopez Roshwalb TuTh 10:00am - 11:50am Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 4) JMP 1215 ONLINE
0501	Peter Sunderland MW 12:00pm - 1:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 8) JMP 1116 ONLINE
0502	Ted Baker MW 12:00pm - 1:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 7) JMP 1215 ONLINE
0601	Timothy Foecke TuTh 12:00pm - 1:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 6) JMP 1116 ONLINE
0602	Jackelyn Lopez Roshwalb TuTh 12:00pm - 1:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 3) JMP 1215 ONLINE
0701	Michael Galczynski MW 2:00pm - 3:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 3) JMP 1116 ONLINE
0702	Brian Danielak MW 2:00pm - 3:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 6) JMP 1215 ONLINE
0801	Brian Danielak TuTh 2:00pm - 3:50pm Class time/details on ELMs Contact instructor or department for details.	Seats (Total: 3) JMP 1116 ONLINE

ENES102
Mechanics I

(Perm req)

Credits: 3

 Grading Method: Regular,
Pass-Fail, Audit

Corequisite: MATH140. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering. Formerly: ENES110.

The equilibrium of stationary bodies under the influence of various kinds of forces. Forces, moments, couples, equilibrium, trusses, frames and machines, centroids, moment of inertia, beams, friction, stress/strain, material properties. Vector and scalar methods are used to solve problems.

0101	Michael Galczynski	Seats (Total: 53)	
	MW 9:00am - 9:50am	KEB 1200	
	F 9:00am - 10:50am	KEB 1200	Discussion
0102	Aris Cleanthous	Seats (Total: 53)	
	MW 11:00am - 11:50am	PHY 4221	
	F 11:00am - 12:50pm	CSI 1122	Discussion
0103	Jarred Young	Seats (Total: 49)	
	MW 12:00pm - 12:50pm	CHE 2118	
	F 12:00pm - 1:50pm	EGR 0108	Discussion
0104	Jarred Young	Seats (Total: 53)	
	MW 2:00pm - 2:50pm	PLS 1130	
	F 2:00pm - 3:50pm	KEB 1200	Discussion
0105	Aris Cleanthous	Seats (Total: 53)	
	MW 1:00pm - 1:50pm	EGR 0108	
	F 1:00pm - 2:50pm	CSI 2117	Discussion

ENES102H

Mechanics I

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Corequisite: MATH140. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering. Formerly: ENES110.

The equilibrium of stationary bodies under the influence of various kinds of forces. Forces, moments, couples, equilibrium, trusses, frames and machines, centroids, moment of inertia, beams, friction, stress/strain, material properties. Vector and scalar methods are used to solve problems.

0101	Gary Pertmer	Seats (Total: 55)	
	MW 9:00am - 9:50am	JMP 3201	
	F 9:00am - 10:50am	CSI 3117	Discussion

0201	Gary Pertmer	Seats (Total: 55)	
	MW 12:00pm - 12:50pm	SPH 1302	
	F 12:00pm - 1:50pm	PHY 1204	Discussion

ENES113 **Virtus Living and Learning Community Seminar I**

Credits: 1 Grading Method: Regular

Restriction: Must be in first year Virtus program.

The seminar focuses on personal and professional development related to the field of engineering with a strong emphasis on clarifying career goals and decisions. Additional topics include an introduction to basic tools, undergraduate research opportunities, and campus and engineering resources.

0101	Jarred Young, Joshua Cocker	Seats (Total: 65)	
	W 4:00pm - 5:30pm	MCB 1207	

ENES115 **FLEXUS Living and Learning Community Seminar I**

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be a first year FLEXUS Participant.

The seminar focuses on personal and professional development related to the field of engineering with a strong emphasis on clarifying career goals and decisions. Additional topics include an introduction to campus and engineering resources, basic tools, and undergraduate research opportunities. Students will discuss issues of concern through a variety of book readings, self-reflections, and panel discussions with practicing women engineers.

0101	Laura Paquin	Seats (Total: 65)	
	W 4:00pm - 5:30pm	KEB 1200	

ENES140 **Discovering New Ventures**

Credits: 3 Grading Method: Regular General Education: DSSP

Additional information: This course may count as an elective for a student at the University of Maryland, depending on the student's specific degree program. It cannot be counted towards the requirements for the Smith School of Business Entrepreneurship Fellow Program.

Students explore dynamic company startup topics by working in teams to design a new venture. This multi-disciplinary course helps students to learn the basic business, strategy, and leadership skills needed to launch new ventures. Topics include learning how to assess the feasibility of a startup venture, as well as how to apply best practices for planning, launching, and managing new companies. Students discuss a wide range of issues of importance and concern to entrepreneurs and learn to recognize opportunities, assess the skills and talents of successful entrepreneurs, and learn models that help them navigate uncertainty.

0101	James Green	Seats (Total: 250)
	Class time/details on ELMs	ONLINE
0201	James Green	Seats (Total: 250)
	Class time/details on ELMs	ONLINE
0301	James Green	Seats (Total: 250)
	Class time/details on ELMs	ONLINE
0401	James Green	Seats (Total: 250)
	Class time/details on ELMs	ONLINE
0501	James Green	Seats (Total: 250)
	Class time/details on ELMs	ONLINE
0601	James Green	Seats (Total: 250)
	Class time/details on ELMs	ONLINE
0701	James Green	Seats (Total: 250)
	Class time/details on ELMs	ONLINE
0801	James Green	Seats (Total: 250)
	Class time/details on ELMs	ONLINE
FC01	Michael Pratt	Seats (Total: 120)
	MW 3:00pm - 4:15pm	BPS 1250

ENES181

Engineering & The Grand Challenges

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; and must be a new freshman or transfer student.

Introduction to the various fields of engineering and the necessary context for students to fully engage in selected National Academy of Engineering's Grand Challenges such as economical solar energy, carbon sequestration, access to clean water, engineering better medicines, restoring urban infrastructure and personalized learning. The lectures and activities will provide an introduction to the engineering disciplines, NAE Grand Challenges, STEM cultures, and research.

0101	Darryll Pines	Seats (Total: 100)
	W 4:00pm - 4:50pm	KEB 1110

ENES190H

Introduction to Design and Quality

Credits: 4

Grading Method: Regular

General Education: DSSP

Prerequisite: Must be in the Quest program. Cross-listed with BMGT190. Credit only granted for: BMGT190 or ENES190.

QUEST students learn and apply design practices to design new products and services. Working in multidisciplinary teams, students use quality and process improvement methods to identify, analyze, and recommend solutions to real-world problems.

First course in a sequence of four Total Quality Program Courses. Restricted to QUEST Honors Program students. Cross-listed with ENES190H.

A Fearless Ideas Course from the Academy for Innovation & Entrepreneurship (AIE): <http://ter.ps/iamFEARLESS> Click here for more information on the Fearless Ideas Courses.

0101	Pamela Armstrong	Seats (Total: 45)
	TuTh 12:30pm - 1:45pm	VMH 1415
	Tu 6:00pm - 7:50pm	VMH 1335 Discussion

ENES210

Entrepreneurial Opportunity Analysis and Decision-Making in 21st Century Technology Ventures

Credits: 3

Grading Method: Regular

CORE: IE

General Education: DSSP, SCIS

Credit only granted for: ENES210 or ENES461.

This multi-disciplinary course helps students learn the principles of entrepreneurial opportunity analysis and decision-making in an increasingly dynamic and technically-inclined society. Emphasis is placed on how aspiring technology entrepreneurs can develop their entrepreneurial perspectives to develop winning entrepreneurial plans for their future ventures.

0101	James Green	Seats (Total: 120)
	Class time/details on ELMs	ONLINE
	M 9:00am - 9:50am	ESJ 1202

0201	James Green	Seats (Total: 120)
	Class time/details on ELMs	ONLINE
	M 10:00am - 10:50am	ESJ 1202
0301	James Green	Seats (Total: 120)
	Class time/details on ELMs	ONLINE
	W 2:00pm - 2:50pm	ESJ 1202
0401	James Green	Seats (Total: 120)
	Class time/details on ELMs	ONLINE
	M 2:00pm - 2:50pm	ESJ 2204
0501	James Green	Seats (Total: 120)
	Class time/details on ELMs	ONLINE
	W 9:00am - 9:50am	ESJ 1202
0601	James Green	Seats (Total: 120)
	Class time/details on ELMs	ONLINE
	W 10:00am - 10:50am	ESJ 1202
0701	James Green	Seats (Total: 120)
	Class time/details on ELMs	ONLINE
	M 1:00pm - 1:50pm	ESJ 1202
0801	James Green	Seats (Total: 120)
	Class time/details on ELMs	ONLINE
	W 1:00pm - 1:50pm	ESJ 1202

ENES213

(Perm req)

Virtus Living and Learning Community Seminar III

Credits: 1

Grading Method: Regular

Prerequisite: ENES113. Restriction: Must be a participant in the second year of the Virtus program.

The seminar focuses on personal, academic and professional success by cultivating leadership skills, developing academic and technical ability and encouraging self awareness, identifying and employing strategies for academic and professional success, further enhancing career development through networking and mentoring and developing awareness of diversity issues.

0101	Kurubel Belay	Seats (Total: 45)
	Th 4:00pm - 5:15pm	PHY 1402

0201	Kurubel Belay, W Ethan Eagle	Seats (Total: 20)
	Contact instructor or department for details.	

ENES215 FLEXUS Living and Learning Community Seminar III

(Perm req)

Credits: 1 Grading Method: Regular

Prerequisite: ENES115 and ENES116. Restriction: Must be a second year FLEXUS participant.

The seminar focuses on personal, academic and professional success by cultivating leadership skills, developing self-confidence and self-efficacy in academic and technical ability and encouraging self awareness, identifying and employing strategies for academic and professional success, further enhancing career development through networking, mentoring and role modeling, and developing awareness of diversity issues, specifically gender diversity.

0101	Julia Anderson, Samantha Sabihi	Seats (Total: 49)
	Th 4:00pm - 5:15pm	BPS 1236
0102	Julia Anderson, Samantha Sabihi	Seats (Total: 30)
	Contact instructor or department for details.	

ENES220 Mechanics II

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Minimum grade of C- in ENES102; and (MATH141 and PHYS161). Restriction: Must be in a major in ENGR-A. James Clark School of Engineering; and must not be in Engineering: Electrical program.

Stress and deformation of solids-rods, beams, shafts, columns, tanks, and other structural, machine and vehicle members. Topics include stress transformation using Mohr's circle; shear and moment diagrams; derivation of elastic curves; and Euler's buckling formula. Design problems related to this material are given in lab.

Prerequisite: student in the College of Engineering.

0101	Thomas Beigel	Seats (Total: 50)
	MW 9:00am - 9:50am	EGR 1108
	F 9:00am - 10:50am	EGR 1108 Discussion
0201	Mary Bowden	Seats (Total: 53)
	MW 12:00pm - 12:50pm	BPS 1236
	F 12:00pm - 1:50pm	CHE 2110 Discussion

0301	William Fourney MW 10:00am - 10:50am F 10:00am - 11:50am	Seats (Total: 54) PHY 4221 EGR 0108	Discussion
0401	Thomas Beigel MW 2:00pm - 2:50pm F 2:00pm - 3:50pm	Seats (Total: 57) EGR 1108 EGR 1108	Discussion
0501	Robert Bonenberger MW 1:00pm - 1:50pm F 1:00pm - 2:50pm	Seats (Total: 57) CSI 2117 MCB 1207	Discussion
0601	Thomas Beigel MW 11:00am - 11:50am F 11:00am - 12:50pm	Seats (Total: 57) EGR 1108 EGR 1108	Discussion
0701	Robert Bonenberger MW 10:00am - 10:50am F 10:00am - 11:50am	Seats (Total: 57) CHM 2201 CSI 1115	Discussion

ENES221

(Perm req)

Dynamics

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in ENES102; and (MATH141 and PHYS161). Restriction: Must be in a major in ENGR-A. James Clark School of Engineering.

Systems of heavy particles and rigid bodies at rest and in motion. Force-acceleration, work-energy and impulse-momentum relationships. Motion of one body relative to another in a plane and in space.

0101	Patrick McAvoy MW 10:00am - 10:50am F 10:00am - 11:50am	Seats (Total: 50) CSI 2117 KEB 1110	Discussion
0103	Patrick McAvoy MW 1:00pm - 1:50pm F 1:00pm - 2:50pm	Seats (Total: 50) CHE 2108 JMP 3201	Discussion
0104	Kevin Calabro MW 12:00pm - 12:50pm F 12:00pm - 1:50pm	Seats (Total: 50) PLS 1130 CSI 1121	Discussion

0105	Patrick McAvoy	Seats (Total: 50)	
	MW 2:00pm - 2:50pm	CHE 2108	
	F 3:00pm - 4:50pm	CHE 2108	Discussion
0106	Kevin Calabro	Seats (Total: 50)	
	MW 2:00pm - 2:50pm	ATL 2428	
	F 2:00pm - 3:50pm	CSI 1121	Discussion

ENES232

Thermodynamics

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS261 and PHYS260. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering. Credit only granted for: BIOE232, CHBE301, ENCH300, ENES232, ENME320, or ENME232. Formerly: ENME232 and ENME320.

Introduction to thermodynamics. Thermodynamic properties of matter. First and second laws of thermodynamics, cycles, reactions, and mixtures.

0101	Raymond Sedwick	Seats (Total: 45)	
	MW 9:00am - 9:50am	PHY 4221	
	F 9:00am - 10:50am	PHY 4221	Discussion
0301	Catherine Hamel	Seats (Total: 45)	
	MW 1:00pm - 1:50pm	TYD 1118	
	F 1:00pm - 2:50pm	CSI 1122	Discussion
0302	W Ethan Eagle	Seats (Total: 45)	
	MW 1:00pm - 1:50pm	SPH 1301	
	F 1:00pm - 2:50pm	SPH 1301	Discussion

ENES304

RISE Seminar

(Perm req)

Credits: 1

Grading Method: Regular

Restriction: Must be in the Engineering RISE Leadership Program; and permission of ENGR-A. James Clark School of Engineering.

This is the first semester of a two semester sequence taken by RISE students in their first semester in the program. The purpose of ENES 304 is for RISE students to learn about leadership, acquire leadership skills, and understand how to integrate leadership theories and concepts in engineering practice. There will be a mix of formal lectures by course faculty and lectures by distinguished speakers who can provide their own experience of what leadership means and how it is acquired. Students will explore their own leadership philosophy and leadership capacities in the context of group practice. Students will make meaning of general leadership theories and concepts and understand how to apply them to engineering industry. Students will also gain understanding of leadership through the stories shared by distinguished speakers with industrial, governmental and academic experience.

0101	Kenneth Kiger, Jane Fines, William Fourney, Natasha Chapman	Seats (Total: 17)
	Tu 5:00pm - 5:50pm	JMP 2120

ENES317 Introduction to Engineering Leadership

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: Permission of ENGR-A. James Clark School of Engineering.

Focus is placed on general leadership theories in addition to real-world applications of leadership in engineering education, industry, and government.

Restricted to students in the Engineering Leadership Development minor (#EN04) and the Global Engineering Leadership minor (#EN09). Students must contact Dr. Natasha Chapman (chapman3@umd.edu) for permission to enroll in this course.

0101	Natasha Chapman	Seats (Total: 45)
	Class time/details on ELMs	ONLINE

ENES390H Designing Innovative Systems

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: ENES190 or BMGT190. Restriction: Must be in the QUEST program. Cross-listed with BMGT390. Credit only granted for: BMGT390 or ENES390.

QUEST students develop an understanding of complex systems that incorporate elements of business and technical design and analyze how these systems evolve over time and may be shaped by technology disruptions, internal decisions, and external forces. Students apply these concepts to real-world complex systems in a team environment.

Restricted to QUEST Honors Program students. Cross-listed with BMGT390H.

0101	Joseph Bailey	Seats (Total: 45)
	TuTh 3:30pm - 4:45pm	VMH 1415

ENES397 Mentoring Multidisciplinary Teams

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Restricted to QUEST Program (TQMP) students. Also offered as: BMGT397. Credit only granted for: BMGT397 or ENES397.

QUEST students practice essential skills for mentoring and coaching multidisciplinary teams. These include effective communications, facilitation, conflict resolution, and the ability to motivate. Students will practice these skills as mentors for student teams from BMGT/ENES 190H. In the process, they will strengthen their knowledge of design and quality techniques.

0101	Pamela Armstrong	Seats (Total: 9)
	Tu 5:00pm - 7:40pm	VMH 1415

ENES424 Engineering Leadership Capstone

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENES472, ENCE320, and ENES317; and permission of ENGR-A. James Clark School of Engineering. Recommended: ENES100.

The work initiated in the Introduction to Engineering Leadership course brings together further exploration of leadership styles and concepts.

Restricted to students with a minor in Engineering Leadership Development.

0101	Natasha Chapman	Seats (Total: 30)
	Tu 5:00pm - 7:45pm	ESJ B0320

ENES440 Science, Technology and Society: Certificate Program Capstone

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in the Science, Technology and Society certificate program; or permission of ENGR-A. James Clark School of Engineering. Credit only granted for: ENES440 or UNIV401. Formerly: UNIV401.

Capstone research seminar for students in the Science, Technology and Society certificate program.

0101	David Tomblin	Seats (Total: 10)
	Contact instructor or department for details.	

ENES460 Fundamentals of Technology Start-Up Ventures

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of ENGR-Maryland Technology Enterprise Institute. Credit only granted for: ENES460, BMGT461 or HLMN470. Additional information: Course may not be used to fulfill any BMGT major or minor program requirement.

Fundamental aspects of creating, organizing, funding, managing, and growing a technology startup venture. This multidisciplinary course will draw on management, business, legal, financial, as well as technical, concepts. Students form teams and develop a business plan for a technology company, based on each team's own business idea and then present the plan to a panel of outside experts.

0101	James Green, Michael Pratt	Seats (Total: 40)
	TuTh 5:00pm - 6:15pm	SCC 2121
	<i>Restricted to students in the Hinman CEOs Program</i>	

ENES461 Advanced Entrepreneurial Opportunity Analysis in Technology Ventures

Credits: 3 Grading Method: Regular

Credit only granted for: ENES210 or ENES461.

Explores the factors that influence entrepreneurial opportunity analysis in technology-based ventures. Uses a cognitive theoretical framework to examine the integration of motivation, emotions and information processing modes to make complex entrepreneurial decisions in technology venture environments.

0101	James Green	Seats (Total: 250)
	Class time/details on ELMs	ONLINE
0201	James Green	Seats (Total: 250)
	Class time/details on ELMs	ONLINE

ENES462 Marketing High-Technology Products and Innovations

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of ENGR-Maryland Technology Enterprise Institute. Additional information: Course may not be used to fulfill any BMGT major or minor program requirement.

Examines the opportunities and challenges of marketing high-technology products in turbulent environments requiring rapid decision making with incomplete information. Explores how innovations are introduced at frequent intervals, research-and-development spending is vital, and there are high mortality rates for both products and businesses.

Restricted to student in the Minor in Technology Entrepreneurship.

0101	Olufunlola Koiki	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

ENES466 Leading and Financing the Technology Venture

Credits: 3 Grading Method: Regular

Restriction: Permission of ENGR-Maryland Technology Enterprise Institute. Credit only granted for: ENES466, BMGT365 or HLMN471. Additional information: Course may not be used to fulfill any BMGT major or minor program requirement.

Focuses on the challenges of leading and financing new technology ventures. Leadership topics include team selection and formation, aligning rewards with relative contributions of team members, and how early decisions can enable or prevent founders from achieving results that align with their individual motivations for becoming an entrepreneur. Essential tools and methods for building a strong financial foundation for a new technology venture are examined. Includes important accounting principles as well as methods for keeping financial control of the technology venture. Insights are shared on navigating the multitude of financial barriers that may block your entrepreneurial success, as well as how to grow the technology venture from concept through launch.

Restricted to students in the Hinman CEOs Program.

0101	James Green, Michael Pratt	Seats (Total: 40)
	MW 5:00pm - 6:15pm	SCC 2121

ENES467 Engineering for Social Change

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must not be in Engineering: Mechanical program; and junior standing or higher; and must be in a major in ENGR-A. James Clark School of Engineering. Cross-listed with ENME467. Credit only granted for: ENES467 or ENME467.

Critical analysis of issues at the intersection of engineering, philanthropy and social change. How engineering design, products and processes have created social change in the past and will do so in the future through both intended and unintended consequences. Topics covered include energy, sustainability and climate change, autonomy, the digital future, low cost engineering, manufacturing, philanthropy, ethics and the impact of electronics on society, among others. Faculty and external experts will engage with students on these topics. Students will broadly engage with organizations involved in using technology for positive social impact.

Cross-listed with ENES467. Credit granted for ENME467 or ENES467. Class will be held off campus at 7878b Diamondback Drive, which is behind The Hotel on Route 1.

0101	Davinder Anand, Sami Ainane	Seats (Total: 50)
	F 11:00am - 1:40pm	Location: TBA

ENES472 International Business Cultures in Engineering and Technology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DVCC

Prerequisite: Permission of ENGR-A. James Clark School of Engineering. Restriction: Sophomore standing or higher. Credit only granted for: ENES472, SLLC471, or SLLC473.

The goal is to provide students with an understanding of cultural aspects pertaining to global business and engineering and develop the cultural understanding, attitudes, and communication skills needed to function appropriately within an increasingly global and multicultural working environment.

Restricted to students with the minor in international engineering (#EN01) and in engineering leadership development (#EN04). Students in global poverty (#AG06), in terrorism studies (#BS07), or in international development and conflict management (#BS02) may request permission for the course from Dr. Natasha Chapman (chapman3@umd.edu). All other students can be placed on a hold file.

0101	Natasha Chapman	Seats (Total: 45)
	Th 6:00pm - 7:45pm	ESJ 0215
	Class time/details on ELMs	ONLINE

ENES480 Engineering Honors Seminar I

Credits: 1 Grading Method: Regular

Restriction: Must be in College of Engineering Honors; and junior standing or higher.

Introduction to engineering leadership, professionalism, and ethics. Discussions of leadership style, elements of success, professional communication, codes of ethics, handling of ethical dilemmas, and the characteristics of a professional.

0103	Richard McCuen	Seats (Total: 20)
	Tu 8:00am - 8:50am	EGR 2116

ENES489A Special Topics in Engineering; Applied Quantitative Analysis

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics in engineering.

Restricted to QUEST Honors Program students. Credit granted for BMGT438A or ENES489A.

0101	Joshua Kohn, David Ashley	Seats (Total: 40)
	M 5:00pm - 7:40pm	VMH 1415

ENES489P Special Topics in Engineering; Hands-on Systems Engineering Projects

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics in engineering.

This hands-on design projects course will expose senior-level undergraduates and graduate students from all areas of engineering to exciting career opportunities in the systems engineering field. Students will be introduced to the technical aspects of systems engineering practice through team-based project development and a systematic step-by-step procedure for product development that includes defining operations concepts, requirements gathering and organization, synthesis of models of system behavior and system structure, functional allocation to create system design alternatives, formal assessment of design alternatives through tradeoff analysis, and established approaches to testing and validation/verification. The students will be introduced to modern methods in Model-Based Systems Engineering, and industrial strength tools and environments for complex systems synthesis. Team projects may address problems from a wide variety of disciplines or cross-disciplines.

0101	Raymond Adomaitis	Seats (Total: 40)
	Tu 5:00pm - 6:15pm	PHY 1402
	Th 3:30pm - 6:30pm	AVW 1442 Lab

ENES490H QUEST Capstone Professional Practicum

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP

Prerequisite: ENES390 or BMGT390. Cross-listed with BMGT490. Credit only granted for: BMGT490 or ENES490.

The capstone course for the QUEST Honors Program provides students with an opportunity to learn in multidisciplinary teams of business, engineering, and science students in a real-world setting. Companies engage teams of QUEST students with real organizational challenges and dedicate resources to help students address these problems. Student teams must enhance their skills in quality management, process improvement, and systems design and will apply these to add value to a client. In the process, students will improve their teamwork skills.

Fourth course in a sequence of four Total Quality Program Courses. Restricted to QUEST Honors Program students.

0101	Christina Elson, David Ashley	Seats (Total: 45)
	W 5:00pm - 7:40pm	VMH 1415
	Contact instructor or department for details.	

ENES491 Scoping Experiential Learning Projects

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: BMGT190 or ENES190. Restriction: Restricted to QUEST Program (TQMP) students. Cross-listed with BMGT491. Credit only granted for: BMGT491 or ENES491.

QUEST students cultivate relationships with new and current corporate partners and prepare project scopes for QUEST's introductory course, BMGT/ENES 190H, and capstone course, BMGT/ENES 490H. Requires independent work communicating with clients and class visits to a variety of potential project sites.

Cross-listed with BMGT491.

0101	Jessica Roffe	Seats (Total: 9)
	F 10:00am - 12:40pm	VMH 1407

ENES602 Future Faculty Program Seminar II

(Perm req)

Credits: 1 Grading Method: Regular,
Audit

Restriction: Must be in the Clark School Future Faculty Program.

Effective teaching techniques. Basic principles of education and learning. Developing a course; promoting active learning, problem solving and critical thinking; designing exam and assignments; and communicating effectively with students.

This course is only open to students in the Clark School Future Faculty Program or by permission of Department.

0101	Amy Karlsson	Seats (Total: 25)
	M 2:00pm - 3:15pm	EGR 2116

ENES604 **Future Faculty Program Teaching Practicum**

(Perm req)

Credits: 1 Grading Method: Regular,
Audit

Prerequisite: ENES602. Restriction: Must be a graduate student in the Clark School Future Faculty Program; and students for whom English is not the native language must pass the Maryland English Institute ITA Evaluation prior to enrolling in this course.

Graduate students will co-teach a course under supervision of a faculty mentor. Graduate students will be involved in all aspects of the course including development of syllabus, presenting lectures, writing and grading examinations, and evaluating the students in the course.

0101	Min Wu	Seats (Total: 10)
	Contact instructor or department for details.	

ENES662 **Innovative Ideas and Concept Development**

Credits: 3 Grading Method: Regular

Enables aspiring entrepreneurs to understand the content, methods, and models for new venture opportunity assessment and analysis. Focuses on how to identify and analyze entrepreneurial opportunities for technology-based ventures by first understanding the personal self and decision-making factors. Explores how to evaluate new venture opportunities and challenges within industries and markets.

Must be in Technology Entrepreneurship program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.

[Click here for program information.](#)

PLM1	James Green	Seats (Total: 30)
	Meets August 26, 2019 - November 15, 2019	
	Class time/details on ELMs	ONLINE

ENES663 **Strategies for Managing Innovation**

Credits: 3 Grading Method: Regular

Credit only granted for: ENES663 or ENPM691.

Emphasizes how innovative leaders can use strategic management of innovation and technology to enhance firm performance. It helps students to understand the process of technological change; the ways that firms come up with innovations; the strategies that firms use to benefit from innovation; and the process of formulating technology strategy. It provides frameworks for analyzing key aspects of these industries and teaches students how to apply these frameworks.

Must be in Technology Entrepreneurship program. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.

Click here for program information.

PLM1	Thomas Mierzwa	Seats (Total: 30)
	Meets August 26, 2019 - November 15, 2019	
	Class time/details on ELMs	ONLINE

ENES666 Creative Design, Prototyping, and Testing

Credits: 3 Grading Method: Regular

Prerequisite: ENES664 and ENES665.

Transition from creative, innovative, design thinking methods to prototyping and concept testing of products and services. Learn how to translate ideas into marketable offerings to create real value for customers and the new venture. Emphasis is placed on an integrated and interdisciplinary approach to engineering design, concurrent engineering, design for manufacturing, industrial design, and the business of new product development. Topics include design methods, modeling and simulation, material and manufacturing process selection, platform and modular design, mass customization, planning and scheduling, and business issues, teamwork, group dynamics, creativity, and innovation.

Restricted to students in Technology Entrepreneurship program.

Click here for program information.

PLM1	Cait von Schnetlage	Seats (Total: 25)
	Meets August 26, 2019 - November 15, 2019	
	Class time/details on ELMs	ONLINE

ENES667 Market Development and Commercialization

Credits: 3 Grading Method: Regular

Prerequisite: ENES664 and ENES665.

Provides an orientation to key marketing concepts critical to marketing technology-based products and services. Learn to identify market opportunities, understand customer preferences, evaluate market acceptance, and devise the appropriate going to market strategies for the new venture.

Restricted to students in Technology Entrepreneurship program.

[Click here for program information.](#)

PLM1	Daniel Dearing	Seats (Total: 25)
	Meets August 26, 2019 - November 15, 2019	
	Class time/details on ELMs	ONLINE

ENES672 **Launching Technology Startup Ventures**

Credits: 6 Grading Method: Regular

Prerequisite: ENES670 and ENES671. Credit only granted for: ENES660 or ENES672.

Explores the processes and skills needed to launch and manage technology startup ventures. Learn how to apply best practices for planning, launching, and leading new companies. Discusses a wide range of issues of importance and concern to entrepreneurs, to include how to navigate uncertainty.

Restricted to students in Technology Entrepreneurship program.

[Click here for program information.](#)

PLM1	Mark Komisky	Seats (Total: 12)
	Meets August 26, 2019 - November 15, 2019	
	Class time/details on ELMs	ONLINE
PLM2	John Jabara	Seats (Total: 12)
	Meets August 26, 2019 - November 15, 2019	
	Class time/details on ELMs	ONLINE

ENFP **Engineering, Fire Protection** **Fall 2019**

ENFP101 **Introduction to Fire Protection Engineering**

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of ENGR-Fire Protection Engineering department. Credit only granted for: ENFP108 or ENFP101. Formerly: ENFP108.

This course will introduce students to the impact of fire on people, property and the environment and methods to mitigate the threat of fire. Student teams will apply the principles of fire behavior and fire safety systems covered in the first half of the course to design, build and test a fire safe, small-scale apartment. A final experiment will be conducted to provide an assessment of the complete designs of each team.

0101	James Milke	Seats (Total: 25)
	M 12:00pm - 12:50pm	JMP 1109

ENFP250 Introduction to Life Safety Analysis

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of ENGR-Fire Protection Engineering department. Credit only granted for: ENFP250 or ENFP251. Formerly: ENFP251.

Introduction to fire protection engineering and building regulation, building safety systems, and egress system design. Evacuation modeling. Human behavior in fires. Tenability Analysis.

0101	Kenneth Isman	Seats (Total: 54)
	TuTh 9:30am - 10:45am	IRB 2207
	F 10:00am - 10:50am	CSI 1122 Discussion

ENFP300 Fire Protection Fluid Mechanics

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH246 and ENFP201; and must have completed or be concurrently enrolled in PHYS260, PHYS261, and ENES232. Restriction: Permission of ENGR-Fire Protection Engineering department.

Presents students with the fundamental properties of fluids and fluid movement. Both static and dynamic fluid problems will be considered with an emphasis on fire protection systems.

0101	Fernando Raffan Montoya	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	CHE 2145
	Tu 5:00pm - 5:50pm	JMP 2202 Discussion

ENFP310 Water Based Fire Protection Systems Design

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENFP300. Corequisite: ENFP312. Restriction: Permission of ENGR-Fire Protection Engineering department.

Introduction to aqueous fire suppression. Discussion of key fluid dynamics and heat transfer processes in aqueous fire suppression. System design and performance analysis based on national standards, hydraulic theory and elementary fluid dynamics and heat transfer.

0101	Kenneth Isman	Seats (Total: 30)
	M 11:00am - 11:50am	ATL 2428
	W 11:00am - 12:50pm	ATL 2428
	F 9:00am - 9:50am	ATL 2428

ENFP312 Heat and Mass Transfer

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENES232 and ENFP300. Restriction: Permission of ENGR-Fire Protection Engineering department.

Fundamentals of heat and mass transfer. Conduction, convection, and radiation modes of heat transfer. Diffusion concepts and evaporation phenomena. Problem solving techniques with application to fire problems.

0105	Marino diMarzo	Seats (Total: 30)
	MW 9:00am - 9:50am	EGR 1202
	M 1:00pm - 2:50pm	JMP 1109 Lab

ENFP405 Structural Fire Protection

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENES220. Restriction: Must be in Engineering: Fire Protection program; and permission of ENGR-Fire Protection Engineering department. Credit only granted for: ENFP405 or ENFP621.

Effects of elevated temperature on structural materials; steel, concrete, wood, gypsum, glass and reinforced plastics. Experimental evaluation of fire resistance of building assemblies. Analytical methods to evaluate fire resistance of structural members.

0101	Catherine Hamel	Seats (Total: 41)
	TuTh 9:30am - 10:45am	ESJ 1215

ENFP413 Human Response to Fire

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENFP250. Restriction: Permission of ENGR-Fire Protection Engineering department. Jointly offered with ENFP613. Credit only granted for: ENFP413 or ENFP613.

Fractional effective dose (FED) methods for predicting time to incapacitation and death of fires for use in fire safety calculations. Physiology and toxicology of the fire effluent components, decomposition chemistry of common materials, standard experimental approaches. Predictive models of material production rates. People movement characteristics related to building evacuation. Formulation and application of evacuation models. Human behavior factors affecting response of people to fire situations.

0101	Christopher Campbell, James Milke	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	EGR 1108

ENFP415

Fire Dynamics

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENFP312. Restriction: Permission of ENGR-Fire Protection Engineering department. Jointly offered with ENFP651. Credit only granted for: ENFP415 or ENFP651.

Designed to give students a quantitative understanding of fire behavior. The fundamentals of physics and chemistry of combustion are presented and used to derive key analytical relationships that describe fire growth. Application of these relationships to the analysis of common fire scenarios is emphasized.

0101	Isaac Leventon	Seats (Total: 45)
	TuTh 11:00am - 12:15pm	PHY 1201

ENFP425

Enclosure Fire Modeling

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENES232, ENFP300, and ENFP312. Restriction: Must be in Engineering: Fire Protection program; and senior standing; and permission of ENGR-Fire Protection Engineering department.

An introduction to enclosure fire dynamics through the development of fire modeling algorithms and the application of computer-based fire modeling techniques. The objectives of the course are: to provide a basic understanding of enclosure fire dynamics with an emphasis on a system-level viewpoint (i.e., a global description of the coupling between combustion dynamics, smoke filling, vent flows and heat transfer); and to provide an introduction to the zone modeling approach. Topics covered include a review of the mathematical formulation of zone models, a discussion of numerical integration of the zone modeling equations (using MATLAB), and an introduction to zone modeling software used by professional engineers (e.g., CFAST).

0101	Stanislav Stoliarov	Seats (Total: 50)
	TuTh 3:30pm - 4:45pm	EGR 1108

ENFP429 Independent Studies

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

For students who have definite plans for individual study of approved problems, or study of an advanced topic selected in conjunction with the faculty.

Senior standing. For ENFP majors only.

Contact department for information to register for this course.

ENFP440 Smoke Management and Fire Alarm Systems

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed with a C- or better or concurrently be enrolled in ENFP300.

Restriction: Permission of ENGR-Fire Protection Engineering department. Jointly offered with ENFP627. Credit only granted for: ENFP440 or ENFP627.

Analysis of hazard posed by smoke in buildings. Performance characteristics of smoke management systems. Review of analytical design aids. Functional analysis and design of fire detection and alerting systems. Examination and evaluation of code criteria, performance specifications and research.

0101	James Milke, Jon Scheer	Seats (Total: 30)
	MW 10:00am - 10:50am	JMP 1202
	F 11:00am - 11:50am	JMP 1202

ENFP464 Industrial Fire Safety

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Students must be of senior standing. Restriction: Permission of ENGR-Fire Protection Engineering department. Also offered as: ENFP664. Credit only granted for: ENFP464, ENFP489I, ENFP629I OR ENFP664.. Formerly: ENFP489I. Additional information: The course will be taught as a dual senior-level undergraduate course and graduate course.

Designed to introduce students to the basics of process safety with a focus on the methods and techniques that may be utilized when evaluating the existing or proposed safety protection solutions in industrial facilities. An emphasis is placed on properly identifying the hazards that are present, the risk exposure, and how best to address the risk. The foundation is laid by presenting the necessary background information on industrial processes and integrating this information with applicable fire/explosion safety science.

0101	Arnaud Trouve	Seats (Total: 20)
	MWF 3:00pm - 3:50pm	ITV 1100

ENFP489

Special Topics

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Selected topics of current importance to fire protection.

For ENFP majors only.

Contact department for information to register for this course.

ENFP601

Fundamentals of Fire Safety

Credits: 3 Grading Method: Regular,
Audit

Additional information: Recommended to incoming graduate students to Fire Protection Engineering who have not earned a Bachelor's Degree in Fire Protection Engineering.

Fundamental principles by which fire protection is introduced in the built environment, processes and systems. Survey prescriptive and quantitative design tools to gain critical perspective on how fire safety interacts with other design constraints, professional disciplines and regulatory environments.

0101	Kenneth Isman	Seats (Total: 10)
	MW 3:00pm - 4:15pm	CHE 2118

ENFP613

Advanced Life Safety Analysis

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of ENGR-Fire Protection Engineering department. Credit only granted for: ENFP413 or ENFP613.

Fractional effective dose (FED) methods for predicting time to incapacitation and death of fires for use in fire safety engineering calculations. Physiology and toxicology of fire effluent components, decomposition chemistry of common materials, standard experimental approaches. Predictive models of material production rates. People movement characteristics related to building evacuation. Formulation and application of evacuation models. Human behavior factors affecting response of people to fire situations.

0101	James Milke, Christopher Campbell	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	EGR 1108

ENFP619**Graduate Seminar**

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

0101	Arnaud Trouve	Seats (Total: 5)
Contact instructor or department for details.		

ENFP620**Fire Dynamics Laboratory**

Credits: 3 Grading Method: Regular,
Audit

Recommended: ENFP415.

Laboratory experiments are designed to illustrate fire phenomena and test theoretical models. Diffusion flames, ignition and flame spread on solids, liquid pool fires, wood crib fires, fire plumes, compartment fires.

0101	Stanislav Stoliarov	Seats (Total: 20)
	W 4:00pm - 8:00pm	EGR 2154

ENFP621**Analytical Procedures of Structural Fire Protection**

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENFP312. Cross-listed with ENFP621. Credit only granted for: ENFP405 or ENFP621.

Analysis procedures for structural components of wood, steel, concrete, composites. Structural capabilities, modifications under fire induced exposures. Calculations, computer models for predicting fire resistance ratings of structural components.

0101	Catherine Hamel	Seats (Total: 14)
	TuTh 9:30am - 10:45am	ESJ 1215

ENFP627**Smoke Detection and Management**

Credits: 3 Grading Method: Regular

Prerequisite: ENFP300. Jointly offered with ENFP440. Credit only granted for: ENFP627 or ENFP440.

Analysis of hazard smoke. Response analysis of smoke detectors based on characteristics of detectors and properties of smoke. Performance characteristics and limitations of smoke management systems. Capabilities and limitations of analytical design aids.

0101	Jon Scheer, James Milke	Seats (Total: 8)
	MW 10:00am - 10:50am	JMP 1202
	F 11:00am - 11:50am	JMP 1202

ENFP629 Selected Topics

(Perm req)

Credits: 3-6 Grading Method: Regular,
Audit

Current research, studies in fire protection engineering. Future trends and significant changes in research, professional areas. The professional standards process.

Contact department for information to register for this course.

ENFP630 Diffusion Flames and Burning Rate Theory

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENFP312.

Basic principles of diffusion flames for gaseous, liquid, and solid fuels. Droplet burning, B number, jet combustion, boundary layer combustion, generalized methods.

0101	Michael Gollner	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	JMP 1109

ENFP649 Special Problems

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

Advanced topics selected by the faculty from the current literature to suit the special needs and background of students, or for individual students who have definite plans of individual study.

Prerequisite: permission of department.

Contact department for information to register for this course.

ENFP651 Advanced Fire Dynamics

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: ENFP629A or ENFP651. Formerly: ENFP629A.

A review of the basic chemistry and physics necessary to understanding fire dynamics; and of the physics of heat transfer and turbulent fluid flow will be given. The nature and structure of premixed and diffusion flames will be presented.

0101	Isaac Leventon	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	PHY 1201

ENFP653 Advanced Fire Supression

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of ENGR-Fire Protection Engineering department. Credit only granted for: ENFP410, ENFP489L, ENFP653, or ENFP629C. Formerly: ENFP629C.

Issues related to the suppression of fires and the design of fire suppression systems. Theoretical aspects of fire suppression and extinction are considered to provide the foundation for the practical design of different types of fire suppression systems. Focus on water-based and "clean agent" fire suppression systems, with emphasis on high challenge and special hazard applications. Systems using other agents are introduced, but are not addressed in detail.

EF01	Jason Sutula	Seats (Total: 40)
	Meets September 9, 2019 - November 29, 2019	
	Class time/details on ELMs	ONLINE
	<i>Permission of OAEE needed on section EF01.</i>	

ENFP664 Advanced Industrial Fire Safety

Credits: 3 Grading Method: Regular,
Audit

Jointly offered with ENFP464. Credit only granted for: ENFP489I, ENFP62 9I, ENFP464, or ENFP664. Formerly: ENFP489I and ENFP629I.

This class is designed to introduce students to the basics of process safety with a focus on the methods and techniques that may be utilized when evaluating the existing or proposed safety protection solutions in industrial facilities. An emphasis is placed on properly identifying the hazards that are present, the risk exposure, and how best to address the risk. The foundation is laid by presenting the necessary background information on industrial processes and integrating this information with applicable fire/explosion safety science.

0101	Arnaud Trouve	Seats (Total: 15)
	MWF 3:00pm - 3:50pm	ITV 1100
EF01	Arnaud Trouve, Noah Ryder	Seats (Total: 40)
	Meets September 9, 2019 - November 29, 2019	
	Class time/details on ELMs	ONLINE

ENFP799**Master's Thesis Research**

(Perm req)

Credits: 1-6

Grading Method: Regular, Sat-Fail

*Development and completion of Master's Thesis.***Contact department for information to register for this course.****ENGL English****Fall 2019***English as a second language classes are listed under UMEI. For more detailed course descriptions, click here to visit the English department website.***ENGL101****Academic Writing**

Credits: 3

Grading Method: Regular

General Education: FSAW

*Additional information: Any student who has not successfully completed this course by Fall 2017 must complete this course with a minimum grade of C- in order to fulfill the General Education Fundamental Studies Academic Writing requirement.**An introductory course in expository writing.*

Students with a TWSE score below 33 must take ENGL 101A in place of ENGL101. Students for whom English is a second language should consider taking ENGL101X in place of ENGL101.

Click here for more course information.

0001	Kathleen Buckley MWF 8:00am - 8:50am	Seats (Total: 19) TWS 0201
0002	Katherine Joshi MWF 8:00am - 8:50am	Seats (Total: 19) TWS 0205
0101	Aaron Bartlett MWF 9:00am - 9:50am	Seats (Total: 19) TWS 0201
0102	Kathleen Buckley MWF 9:00am - 9:50am	Seats (Total: 19) TWS 0205
0103	Tamar Leroy MWF 9:00am - 9:50am	Seats (Total: 19) TWS 0214
0108	William Pittman MWF 9:00am - 9:50am	Seats (Total: 19) TWS 0236

0201	Marina Seamans MWF 10:00am - 10:50am	Seats (Total: 19) TWS 0201
0202	Steve Beaulieu MWF 10:00am - 10:50am	Seats (Total: 19) JMZ 0208
0205	William Pittman MWF 10:00am - 10:50am	Seats (Total: 19) TWS 0205
0206	Ayesha Shibli MWF 10:00am - 10:50am	Seats (Total: 19) TWS 0221
0208	James Rankin MWF 10:00am - 10:50am	Seats (Total: 19) KEY 0125
0302	Stephanie Allen MWF 11:00am - 11:50am	Seats (Total: 19) KEY 0102
0303	Claudia Allen MWF 11:00am - 11:50am	Seats (Total: 19) KEY 0121
0304	Ayesha Shibli MWF 11:00am - 11:50am	Seats (Total: 19) TWS 0205
0305	Max Lasky MWF 11:00am - 11:50am	Seats (Total: 19) SQH 1123
0306	Cristi Whiskey MWF 11:00am - 11:50am	Seats (Total: 19) AJC 2134
0401	Jehane Sharah MWF 12:00pm - 12:50pm	Seats (Total: 19) ASY 3221
0402	Stephanie Allen MWF 12:00pm - 12:50pm	Seats (Total: 19) JMZ 2122
0403	Maiasia Grimes MWF 12:00pm - 12:50pm	Seats (Total: 19) JMZ 0122
0404	Jeffrey Moro MWF 12:00pm - 12:50pm	Seats (Total: 19) ASY 3219

0405	William Pittman MWF 12:00pm - 12:50pm	Seats (Total: 19) KNI 1105
0406	Hannah Beilenson MWF 12:00pm - 12:50pm	Seats (Total: 19) JMZ 1117
0502	Garth Libhart MWF 1:00pm - 1:50pm	Seats (Total: 19) TWS 1105
0503	Claudia Allen MWF 1:00pm - 1:50pm	Seats (Total: 19) TWS 1321
0504	Nia Crawford MWF 1:00pm - 1:50pm	Seats (Total: 19) TWS 1106
0505	Uchechi Okereke-Beshel MWF 1:00pm - 1:50pm	Seats (Total: 19) TWS 0234
0507	Joshua Weiss MWF 1:00pm - 1:50pm	Seats (Total: 19) TWS 1320
0508	Jeffrey Griswold MWF 1:00pm - 1:50pm	Seats (Total: 19) ASY 3221
0602	Brian Davis MWF 2:00pm - 2:50pm	Seats (Total: 19) KEY 0121
0603	Valentina Rosales MWF 2:00pm - 2:50pm	Seats (Total: 19) JMZ 2120
0604	Shalom Rosenberg MWF 2:00pm - 2:50pm	Seats (Total: 19) JMZ 2123
0605	Jehane Sharah MWF 2:00pm - 2:50pm	Seats (Total: 19) JMZ 2125
0606	Annemarie Ewing MWF 2:00pm - 2:50pm	Seats (Total: 19) JMZ 0103
1001	Tonianne Bellomo TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 0214

1002	Kelsey Kerr TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 0221
1102	Brandy Williams TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 0201
1103	Andy Yeh TuTh 9:30am - 10:45am	Seats (Total: 19) ASY 3217
1104	Brittany Starr TuTh 9:30am - 10:45am	Seats (Total: 19) KEY 0121
1105	Michael Becker TuTh 9:30am - 10:45am	Seats (Total: 19) EDU 3233
1106	Jesse Brooks TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 1107
1107	Kelsey Kerr TuTh 9:30am - 10:45am	Seats (Total: 19) JMZ 0118
1108	Sabrina Islam TuTh 9:30am - 10:45am	Seats (Total: 19) JMZ 0125
1203	Shonte Murray-Daniels TuTh 11:00am - 12:15pm	Seats (Total: 19) KEY 0102
1204	Kristofer Reed TuTh 11:00am - 12:15pm	Seats (Total: 19) KNI 1105
1205	Elizabeth Nonemaker TuTh 11:00am - 12:15pm	Seats (Total: 19) KEY 0121
1301	Hunter Parsons TuTh 12:30pm - 1:45pm	Seats (Total: 19) TWS 0221
1302	Samantha O'Connor TuTh 12:30pm - 1:45pm	Seats (Total: 19) JMZ 2123
1303	Maggie Gill TuTh 12:30pm - 1:45pm	Seats (Total: 19) TWS 1107

1304	John Pugh TuTh 12:30pm - 1:45pm	Seats (Total: 19) KNI 1105
1305	Alannah Hensley TuTh 12:30pm - 1:45pm	Seats (Total: 19) JMZ 0205
1306	Katie Bramlett TuTh 12:30pm - 1:45pm	Seats (Total: 19) TWS 1313
1307	Heather McHale TuTh 12:30pm - 1:45pm <i>Restricted to students in Institute of Applied Agriculture.</i>	Seats (Total: 15) JUL 1123
1401	Nahid Ahmadian TuTh 2:00pm - 3:15pm	Seats (Total: 19) KEY 0102
1402	John Macintosh TuTh 2:00pm - 3:15pm	Seats (Total: 19) TWS 0221
1403	Michael Becker TuTh 2:00pm - 3:15pm	Seats (Total: 19) TWS 0205
1404	Nicole Cuffy TuTh 2:00pm - 3:15pm	Seats (Total: 19) TWS 0207
9001	John Macintosh Tu 9:30am - 10:45am Th 9:30am - 10:45am	Seats (Total: 19) KEY 0120 ONLINE
9002	Sara Faradji Tu 11:00am - 12:15pm Th 11:00am - 12:15pm	Seats (Total: 19) KEY 0120 ONLINE
9003	Rachel Waugh Th 9:30am - 10:45am Tu 9:30am - 10:45am	Seats (Total: 19) KEY 0120 ONLINE
9004	Rachel Waugh Th 11:00am - 12:15pm Tu 11:00am - 12:15pm	Seats (Total: 19) KEY 0120 ONLINE

9005	David Brookshire MF 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 19) KEY 0120 ONLINE
9006	David Brookshire MF 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 19) KEY 0120 ONLINE
9007	David Brookshire MF 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 19) KEY 0120 ONLINE
9008	David Brookshire MF 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 19) KEY 0120 ONLINE
9009	Emily Flamm MW 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 19) TWS 0214 ONLINE
9010	Emily Flamm MW 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 19) TWS 1107 ONLINE
9011	Emily Flamm MW 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 19) TWS 0201 ONLINE
9012	Robert Lucci MW 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 19) TWS 0214 ONLINE
9013	Amanda Allen Tu 9:30am - 10:45am Th 9:30am - 10:45am	Seats (Total: 19) KEY 0123 ONLINE
9014	Amanda Allen Tu 11:00am - 12:15pm Th 11:00am - 12:15pm	Seats (Total: 19) KEY 0123 ONLINE

9015	Amanda Allen Tu 12:30pm - 1:45pm Th 12:30pm - 1:45pm	Seats (Total: 19) KEY 0120 ONLINE
9016	Amanda Allen Tu 2:00pm - 3:15pm Th 2:00pm - 3:15pm	Seats (Total: 19) KEY 0120 ONLINE
9017	Tricia Raysor Th 9:30am - 10:45am Tu 9:30am - 10:45am	Seats (Total: 19) KEY 0123 ONLINE
9018	Konstantinos Pozoukidis Th 11:00am - 12:15pm Tu 11:00am - 12:15pm	Seats (Total: 19) KEY 0123 ONLINE
9019	Tricia Raysor Th 12:30pm - 1:45pm Tu 12:30pm - 1:45pm	Seats (Total: 19) KEY 0120 ONLINE
9020	Tricia Raysor Th 2:00pm - 3:15pm Tu 2:00pm - 3:15pm	Seats (Total: 19) KEY 0120 ONLINE
9021	Sara Faradji Tu 12:30pm - 1:45pm Th 12:30pm - 1:45pm	Seats (Total: 19) KEY 0102 ONLINE
9022	Susan Pramschufer Th 12:30pm - 1:45pm Tu 12:30pm - 1:45pm	Seats (Total: 19) KEY 0102 ONLINE
FC01	Nia Crawford MW 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0121
FC02	Thibault Raoult MW 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0121

FC03	Robert Lucci MW 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) TWS 0223
FC04	Nia Crawford MW 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0121
FC05	Joshua Weiss MW 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0123
FC06	Robert Lucci MW 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0102
FC07	Paul Cote MW 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0123
FC08	Bryan Head TuTh 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0123
FC09	Virginia Butler TuTh 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0120
FC10	Jesse Brooks TuTh 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0120
FC11	Sabrina Islam TuTh 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) TWS 0236
FC12	Daniel Kason MW 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) TWS 0214

FC13	Jesse Brooks TuTh 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0120
FC14	Elizabeth Benton TuTh 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0125
FC15	Benjamin Baker TuTh 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0123
FC16	Mariko Carson TuTh 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0102
FC17	Sabrina Islam TuTh 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) TWS 0221
FC18	Sabrina Islam TuTh 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) TWS 1321
FC19	Erica Cochran MW 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0120
FC20	Paul Cote MW 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0120
FC21	Emilee Durand MW 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) ASY 3219
FC22	Benjamin Baker TuTh 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) TWS 0221

FC23	Radford Skudrna MW 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0123
FC24	Mariko Carson TuTh 6:00pm - 7:15pm <i>Restricted to Freshmen Connection Students.</i>	Seats (Total: 19) TWS 0205
FC25	Joshua Weiss MW 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) JMZ 1120
FC26	Nia Crawford MW 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0125
FC27	Kyle Bickoff MW 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 19) KEY 0121

ENGL101A

Academic Writing

Credits: 3

Grading Method: Regular

General Education: FSAW

Additional information: Any student who has not successfully completed this course by Fall 2017 must complete this course with a minimum grade of C- in order to fulfill the General Education Fundamental Studies Academic Writing requirement.

An introductory course in expository writing.

Students should take ENGL 101A rather than ENGL 101 if their TWSE score (a subscore of the SAT verbal) is 33 or below.

1703	Radford Skudrna MWF 12:00pm - 12:50pm	Seats (Total: 15) TWS 0230
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ENGL101C

Academic Writing

Credits: 3

Grading Method: Regular

General Education: FSAW

Additional information: Any student who has not successfully completed this course by Fall 2017 must complete this course with a minimum grade of C- in order to fulfill the General Education Fundamental Studies Academic Writing requirement.

An introductory course in expository writing.

Restricted to students in the Civicus Program.

0209	Joshua Weiss	Seats (Total: 19)
	MWF 10:00am - 10:50am	SOM 0101
0309	Paul Cote	Seats (Total: 19)
	MWF 11:00am - 11:50am	SOM 0101

ENGL101H**Academic Writing**

Credits: 3

Grading Method: Regular

General Education: FSAW

Additional information: Any student who has not successfully completed this course by Fall 2017 must complete this course with a minimum grade of C- in order to fulfill the General Education Fundamental Studies Academic Writing requirement.

An introductory course in expository writing.

For general honors students or students with a verbal SAT of 600 or better.

0109	Katherine Joshi	Seats (Total: 19)
	MWF 9:00am - 9:50am	TWS 1106
0210	Katherine Joshi	Seats (Total: 19)
	MWF 10:00am - 10:50am	TWS 1320
0310	Peter Witte	Seats (Total: 19)
	MWF 11:00am - 11:50am	TWS 0221
0407	Justin Lohr	Seats (Total: 19)
	MWF 12:00pm - 12:50pm	JMZ 0205
0507	Justin Lohr	Seats (Total: 19)
	MWF 1:00pm - 1:50pm	TWS 0201
1107	Megan Howell	Seats (Total: 19)
	TuTh 9:30am - 10:45am	JMZ 0205
1207	Kelsey Kerr	Seats (Total: 19)
	TuTh 11:00am - 12:15pm	KEY 0124

ENGL101S**Academic Writing**

Credits: 3

Grading Method: Regular

General Education: FSAW

Additional information: Any student who has not successfully completed this course by Fall 2017 must complete this course with a minimum grade of C- in order to fulfill the General Education Fundamental Studies Academic Writing requirement.

An introductory course in expository writing.

This course is restricted to College Park Scholars.

0110	Peter Witte MWF 9:00am - 9:50am	Seats (Total: 19) CCC 1111
0211	Mike Kolakoski MWF 10:00am - 10:50am	Seats (Total: 19) CCC 1115
0212	Kristine Morrissey MWF 10:00am - 10:50am	Seats (Total: 19) CCC 1105
0311	Lara Payne MWF 11:00am - 11:50am	Seats (Total: 19) CCC 1105
0312	Kristine Morrissey MWF 11:00am - 11:50am	Seats (Total: 19) CCC 1115
0410	Gail Upchurch MWF 12:00pm - 12:50pm	Seats (Total: 19) CCC 1115
0509	Mike Kolakoski MWF 1:00pm - 1:50pm	Seats (Total: 19) CCC 1115
0607	Lara Payne MWF 2:00pm - 2:50pm	Seats (Total: 19) CCC 1105
1108	Melvette Davis TuTh 9:30am - 10:45am	Seats (Total: 19) CCC 1115
1208	Alexandra Calloway TuTh 11:00am - 12:15pm	Seats (Total: 19) CCC 1105
1209	Grace Kwon TuTh 11:00am - 12:15pm	Seats (Total: 19) CCC 1115

1210	John Kim TuTh 11:00am - 12:15pm	Seats (Total: 19) CCC 1200
1308	William Gonch TuTh 12:30pm - 1:45pm	Seats (Total: 19) CCC 1115
9001	Catherine Bayly MF 12:00pm - 12:50pm Class time/details on ELMs	Seats (Total: 19) CCC 1205 ONLINE
9002	Catherine Bayly MF 1:00pm - 1:50pm Class time/details on ELMs	Seats (Total: 19) CCC 1205 ONLINE

ENGL101X Academic Writing

Credits: 3

Grading Method: Regular

General Education: FSAW

Additional information: Any student who has not successfully completed this course by Fall 2017 must complete this course with a minimum grade of C- in order to fulfill the General Education Fundamental Studies Academic Writing requirement.

An introductory course in expository writing.

Limited to students for whom English is a second language. The following are indications that a student should register for English 101X: 1) an iBT TOEFL score of 100 overall, with a writing section score of at least 24; 2) an IELTS score of 7.0 overall, with a writing score of at least 7.0; 3) satisfactory completion of UMEI 005: Advanced English as a Foreign Language.

2002	Daniel Quimby TuTh 9:30am - 10:45am	Seats (Total: 18) JMZ 2123
2003	Laura Williams TuTh 11:00am - 12:15pm	Seats (Total: 18) TWS 1106
2004	Benjamin Baker MWF 10:00am - 10:50am	Seats (Total: 18) KEY 0102
2005	Da Lee MWF 12:00pm - 12:50pm	Seats (Total: 18) JMZ 1124
2006	Laura Williams TuTh 2:00pm - 3:15pm	Seats (Total: 18) TWS 1105

2007	Benjamin Baker	Seats (Total: 18)
	MWF 11:00am - 11:50am	KEY 0123

ENGL132 Aliens, Exiles, and Immigrants

Credits: 3 Grading Method: Regular

General Education: DSHU,
DVUP, SCIS

Credit only granted for: ENGL132 or ENGL289Z. Formerly: ENGL289Z.

Exploration of ideas, beliefs, and aspirations that immigrants carry from one nation to another. Different ways of understanding national and cultural identities, and ways the experiences of immigration have changed significantly over time. Readings examine historical and contemporary immigrant writing, including post-9/11 poetry and fiction; memoirs of nineteenth-century British emigrants to South Africa, Australia, and Canada; literature by emigrants from Asia, the Middle East, and Latin America now living in the United States; and writing by individuals displaced by war, famine, and political conflict. Politics of immigration and citizenship; historical and contemporary arguments for and against immigration and assimilation.

0101	Mike Kolakoski	Seats (Total: 30)
	MWF 11:00am - 11:50am	ANS 0402
0201	Mike Kolakoski	Seats (Total: 30)
	MWF 12:00pm - 12:50pm	ANS 0402

ENGL134 The Rites of Discovery: Science, Law and Literature 1492 to 1992

Credits: 3 Grading Method: Regular

General Education: DSHU,
DVUP, SCIS

Credit only granted for: ENGL134 or ENGL289B. Formerly: ENGL289B.

History of idea of "discovery" from sixteenth-century debate about European "rights of discovery" to 500th anniversary, in 1992, of Columbus' landfall in New World. Evolution of modern concept of discovery, both as part of history of science and in legal context of history of European colonialism and cultural encounter with Native peoples of Americas, Africa, and Asia. Exploration of primary and secondary sources relating to international law, science, and literature.

0101	Cheryl Spinner	Seats (Total: 30)
	TuTh 9:30am - 10:45am	TWS 0221
0201	Cheryl Spinner	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	TWS 1320

ENGL140**American Fictions: U.S. Literature, History, Politics, and Constitutional Law**

Credits: 3

Grading Method: Regular

General Education: DSHU,
SCIS*Credit only granted for: ENGL140 or ENGL289Y. Formerly: ENGL289Y.*

Works of American literature explored in the context of major texts and developments of U.S. history, culture, politics, and constitutional law. We begin with the Declaration of Independence and the U.S. Constitution, and survey the course of American literature and history, from 1776 to the present, in relation to defining political and constitutional issues. Readings of canonical works like "Huckleberry Finn" and "The Grapes of Wrath" coupled with special attention to minority authors and issues, and horizons of constitutional contemplation opened up by minority, immigrant, and women's voices and experiences. Key historical and political issues include human rights; equal protection; religious tolerance; democratic principles; republican structures of government; independence; revolution; slavery; removal; immigration; free speech; labor rights; civil rights; feminism; environmentalism; international law and flows of people; economic globalization; technology and digital innovation; and the role that literature and the humanities play in fostering various forms of civil society, multiculturalism, and a globally accountable citizenship.

0101	Peter Mallios	Seats (Total: 24)	
	MW 1:00pm - 1:50pm	TWS 1100	
	F 10:00am - 10:50am	TWS 0236	Discussion
0102	Peter Mallios	Seats (Total: 24)	
	MW 1:00pm - 1:50pm	TWS 1100	
	F 11:00am - 11:50am	TWS 0236	Discussion
0103	Peter Mallios	Seats (Total: 24)	
	MW 1:00pm - 1:50pm	TWS 1100	
	F 12:00pm - 12:50pm	TWS 0236	Discussion
0104	Peter Mallios	Seats (Total: 24)	
	MW 1:00pm - 1:50pm	TWS 1100	
	F 1:00pm - 1:50pm	TWS 0236	Discussion

ENGL201**Inventing Western Literature: Ancient and Medieval Traditions**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: HL

General Education: DSHU

Wide range of texts, genres, and themes from ancient and medieval Western traditions. Study of cultural, historical, and artistic forces shaping traditions, and the influence and relevance of those traditions to life in twenty-first century.

0101	Garth Libhart	Seats (Total: 30)
	MWF 12:00pm - 12:50pm	TWS 1106

ENGL202 Inventing Western Literature: Renaissance to Modern

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL General Education: DSHU

Wide range of texts from the Renaissance to the 21st century. Themes and literary techniques in the evolution of Western literature. Print publication, industrialization, questioning of religious, political, intellectual, and cultural authority.

Contact department for information to register for this course.

ENGL206 Shakespeare

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL General Education: DSHU

Credit only granted for: ENGL205, ENGL206, or ENGL289I. Formerly: ENGL205.

Shakespeare's poems, history plays, comedies, and tragedies as investigations into language use, governance, sexuality, ethics, and mortality.

Contact department for information to register for this course.

ENGL211 English Literature: Beginnings to 1800

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL General Education: DSHU

Surveys medieval and early modern literary works written in England. Readings may include Beowulf, Chaucer, Spenser, Mary Wroth, Milton; eighteenth-century satire, drama, novels.

Contact department for information to register for this course.

ENGL222 American Literature: 1865 to Present

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL General Education: DSHU

Surveys American writing from the Civil War through the Cold War. Authors such as Clemens, Frost, Hurston, Bellow.

0301	William Gonch	Seats (Total: 30)
	TuTh 9:30am - 10:45am	TWS 0236

ENGL233 Introduction to Asian American Literature

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL, D General Education: DSHU, DVUP

Cross-listed with AAST233. Credit only granted for: ENGL233 or AAST233.

A survey of Asian American literatures with an emphasis on recurrent themes and historical context.

0101	Katie Bramlett	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	TWS 1320

ENGL234 African-American Literature and Culture

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL, D General Education: DSHU, DVUP

Cross-listed with: AASP298L. Credit only granted for: ENGL234 or AASP298L.

An exploration of the stories black authors tell about themselves, their communities, and the nation as informed by time and place, gender, sexuality, and class. African American perspective themes such as art, childhood, sexuality, marriage, alienation and mortality, as well as representations of slavery, Reconstruction, racial violence and the Nadir, legalized racism and segregation, black patriotism and black ex-patriots, the optimism of integration, and the prospects of a post-racial America.

Cross-listed with AASP298L. Credit will be granted for one of the following: AASP298L or ENGL234.

0201	Steve Beaulieu	Seats (Total: 30)
	MWF 12:00pm - 12:50pm	KEY 0125

ENGL235 U.S. Latinx Literature and Culture

Credits: 3 Grading Method: Regular, Pass-Fail CORE: HL, D General Education: DSHU, DVUP

Cross-listed with: AMST298Q. Credit only granted for: ENGL235 or AMST298Q.

Examines the poetry, prose, and theater of Latinx communities in the United States from their origins in the Spanish colonization of North America to their ongoing development in the 21st century. Considers how authors use literary form to gain insight into human experience, including mortality, religious belief, gender and sexuality, war and peace, family, language use, scientific inquiry, cultural tradition, ecology, and labor. Also studies how Latinx literary traditions have shaped and been shaped by broader currents in American literature, as well as what connections exist between Latinx literature and social and artistic developments in other parts of the world, particularly Latin America and the Caribbean. Authors may include Alvar Nunez Cabeza de Vaca, Eulalia Perez, Juan Nepomuceno Seguin, Maria Amparo Ruiz de Burton, Jose Marti, Arthur A. Schomburg, Jesus Colon, Julia de Burgos, Cesar Chavez, Ariel Dorfman, Gloria Anzaldua, Junot Diaz, and Cristina Garcia.

Additional Note: Cross-listed with AMST298Q. Credit granted for ENGL235 or AMST298Q.

0101	Nancy Vera	Seats (Total: 30)
	MW 5:00pm - 6:15pm	KEY 0102

ENGL240 Introduction to Fiction, Poetry, and Drama

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL

Readings in the novel, short story, poetry and drama.

Contact department for information to register for this course.

ENGL243 What is Poetry?

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL General Education: DSHU

An exploration of arguably the most complex, profound, and ubiquitous expression of human experience. Study through close reading of significant forms and conventions of Western poetic tradition. Poetry's roots in oral and folk traditions and connections to popular song forms.

0201	Samantha O'Connor	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	KEY 0125

ENGL245 Film Form and Culture

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HA General Education: DSHU

Cross-listed with FILM245. Credit only granted for: ENGL245 or FILM245.

Introduction to film as art form and how films create meaning. Basic film terminology; fundamental principles of film form, film narrative, and film history. Examination of film technique and style over past one hundred years. Social and economic functions of film within broader institutional, economic, and cultural contexts.

0101	Eric Zakim	Seats (Total: 25)
	MW 1:00pm - 1:50pm	TWS 0320
	F 1:00pm - 1:50pm	TWS 1107 Discussion
0102	Eric Zakim	Seats (Total: 25)
	MW 1:00pm - 1:50pm	TWS 0320
	F 11:00am - 11:50am	TWS 1107 Discussion

0103	Eric Zakim	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	TWS 0320	
	F 1:00pm - 1:50pm	TWS 0214	Discussion
0104	Eric Zakim	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	TWS 0320	
	F 12:00pm - 12:50pm	TWS 0201	Discussion
FCB1	Kyle Bickoff	Seats (Total: 26)	
	M 6:00pm - 7:15pm	ASY 3207	
	Class time/details on ELMs	ONLINE	
	<i>Restricted to students in Freshmen Connection.</i>		

ENGL250

Reading Women Writing

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL, D General Education: DSHU, DVUP

Cross-listed with WMST255. Credit only granted for: ENGL250 or WMST255.

Explores literary and cultural expressions by women and their receptions within a range of historical periods and genres. Topics such as what does a woman need in order to write, what role does gender play in the production, consumption, and interpretation of texts, and to what extent do women comprise a distinct literary subculture. Interpretation of texts will be guided by feminist and gender theory, ways of reading that have emerged as important to literary studies over the last four decades.

0101	Justin Thompson	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	TWS 0236

ENGL255

Literature of Science and Technology

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL General Education: DSHU

Credit only granted for: ENGL255 or ENGL278T. Formerly: ENGL278T.

Examines science and technology through the lens of British and American literature, primarily between 1800 and the present. Readings from early natural and experimental philosophers of the Scientific Revolution and Enlightenment. How literary works represent the ethics of science and technology; beneficial developments of science, and also heavy toll of industrialization. Writers studied may include Francis Bacon, Mary Shelley, Charles Darwin, H.G. Wells, Albert Einstein, Aldous Huxley, Richard Feynman, Philip K. Dick, Octavia Butler, Michael Frayn, and Tom Stoppard.

0101	Melanie Rio	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	TWS 0207
FC01	Katharina Luther	Seats (Total: 26)
	TuTh 6:00pm - 7:15pm	KEY 0102
<i>Restricted to students in Freshmen Connection.</i>		

ENGL256

Fantasy Literature

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSHU

How fantasy employs alternate forms of representation, such as the fantastical, estranging, or impossible, which other genres would not allow. Through novels, short stories, graphic novels, and film, traces fantasy's roots in mythology and folklore, then explores how modern texts build upon or challenge these origins. Examination of literary strategies texts use to represent the world through speculative modes. How to distinguish fantasy from, and relate it to, other genres such as science fiction, horror, fairy tales, and magical realism. Fantasy's investment in world-building, history, tradition, and categories of identity such as race, class, and gender. How fantasy, as a genre, form, and world-view, is well-suited to our contemporary reality.

0101	April Fuller	Seats (Total: 30)
	MWF 12:00pm - 12:50pm	EDU 3315

ENGL257

Children's Literature

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSHU

Literature of the nineteenth through the twenty-first century concerned with, and written for, children and young adults. How such narratives speak to themes of changing social, religious, political, and personal identity. Through poetry, novels, graphic novels, and film, explores how children's tales encapsulate and reflect on human existence, while pushing boundaries of what constitutes "children's literature" and what exactly defines the "child." Considers questions of literary classification through investigation of political and religious issues, gender politics, animal rights, social justice, race, war, and what it means to "grow up."

0101	Hillary Roegelein	Seats (Total: 30)
	MW 3:30pm - 4:45pm	TWS 1107

ENGL265

LGBTQ+ Literatures and Media

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: HL, D General Education: DSHU,
DVUP

Restriction: Must not have completed LGBT265. Cross-listed with LGBT265 . Credit only granted for: ENGL265 or LGBT265.

A study of literary and cultural expressions of queer and trans identities, positionalities, and analytics through an exploration of literature, art, and media. We will examine historical and political power relations by considering the intersections of sexuality and gender with race, class, nation, and disability. Topics include the social construction and regulation of sexuality and gender, performance and performativity, intersectionality, and the relationship between aesthetic forms and queer/ trans subjectivity. Our interpretations will be informed by queer and trans theories.

0101	John Macintosh	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	TWS 1106
0201	Konstantinos Pozoukidis	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	TWS 0236

ENGL269A Special Topics in Study Abroad II; German Romanticism in its European Context

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL269B Special Topics in Study Abroad II; Writing Workshop I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL269C Special Topics in Study Abroad II; Writing Workshop II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL269R Special Topics in Study Abroad II; Writing Rome

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL271**Writing Poems and Stories: An Introductory Workshop**

Credits: 3

Grading Method: Regular,
Pass-Fail

General Education: DSSP

Introduction to theory and practice of writing fiction and poetry. Emphasis on critical reading of literary models. Exercises and workshop discussions with continual reference to modeling, drafting, and revising as necessary stages in a creative process.

0101	Shonte Murray-Daniels TuTh 12:30pm - 1:45pm	Seats (Total: 15) KEY 0124
0102	Shonte Murray-Daniels TuTh 12:30pm - 1:45pm <i>Restricted to students in Jimenez-Porter Writers' House.</i>	Seats (Total: 5) KEY 0124
0201	Max Lasky MW 2:00pm - 3:15pm	Seats (Total: 20) KEY 0123
0301	Hunter Parsons TuTh 9:30am - 10:45am	Seats (Total: 20) KEY 0124
FC01	Bryan Head TuTh 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) KEY 0123

ENGL272**Writing Fiction: A Beginning Workshop**

Credits: 3

Grading Method: Regular,
Pass-Fail

General Education: DSSP

Introduction to theory and practice of writing fiction. Emphasis on critical reading of literary models. Exercises and workshop discussions with continual reference to modeling, drafting, and revising as necessary stages in a creative process.

0101	Maggie Gill TuTh 9:30am - 10:45am	Seats (Total: 20) KEY 0125
0201	Maiasia Grimes MW 2:00pm - 3:15pm	Seats (Total: 20) KEY 0120
0301	Megan Howell TuTh 12:30pm - 1:45pm	Seats (Total: 20) KEY 0123

0401	Elizabeth Nonemaker	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	KEY 0121

ENGL273 Writing Poetry: A Beginning Workshop

Credits: 3 Grading Method: Regular, General Education: DSSP
Pass-Fail

Introduction to theory and practice of writing poetry. Emphasis on critical reading of literary models. Exercises and workshop discussions with continual reference to modeling, drafting, and revising as necessary stages in a creative process.

0101	Hannah Beilenson	Seats (Total: 20)
	MW 2:00pm - 3:15pm	KEY 0125
0201	Alannah Hensley	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	KEY 0123

ENGL274 Creative Writing Through The Eyes of African Americans: A Beginning Workshop

Credits: 3 Grading Method: Regular, General Education: DSSP
Pass-Fail

Restriction: Must not have completed ENGL271, ENGL274, ENGL294, or AASP274. Cross-listed with AASP274. Credit only granted for: ENGL274 or AASP274.

Introduction to theory and practice of writing fiction, drama and poetry, with an emphasis on African American literary models. Critical reading, exercises and workshop discussions with continual reference to modeling, drafting, and revising as necessary stages in a creative process.

0101	Dorothy Phaire	Seats (Total: 20)
	TuTh 9:30am - 10:45am	NCC 0120

ENGL275 Scriptwriting for Theater, Film, and Television

Credits: 3 Grading Method: Regular, General Education: DSHU,
Pass-Fail DSSP

Cross-listed with ARHU275. Credit only granted for: ENGL278D, ENGL275, ARHU319B, or ARHU275. Formerly: ENGL278D; ARHU319B.

Introduction to the theory and practice of scriptwriting with an opportunity to read, view, evaluate, write, and revise texts meant to be performed. Students will practice writing for the stage, film, and television and also examine selected scripts, performances, and film and television clips as models for their own creative work. Students will complete frequent writing exercises, participate in workshops, and learn to apply scholarship to the analysis and critique of scripts.

Cross-listed with ARHU275.

0101	Joseph Angelella	Seats (Total: 15)
	TuTh 3:30pm - 4:45pm	TWS 1105
0102	Joseph Angelella	Seats (Total: 5)
	TuTh 3:30pm - 4:45pm	TWS 1105
	<i>Restricted to students in the Jimenez-Porter Writers' House.</i>	
0201	Stan Waring	Seats (Total: 20)
	MWF 10:00am - 10:50am	KEY 0123

ENGL278B Special Topics in Literature; German Romanticism in its European Context

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

ENGL278N Special Topics in Literature; The Romantic Experience in Europe

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

ENGL278O Special Topics in Literature; German Romanticism in its European Context

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

ENGL280 The English Language

Credits: 3 Grading Method: Regular, CORE: HO General Education: DSHU
Pass-Fail, Audit

Introduction to the structure of English and its historical development, with a focus on techniques of linguistic analysis. Major topics include the sound systems of English and its patterns of word formation and sentence structure, and the ways these have changed over time and vary around the world.

0101	Linda Coleman	Seats (Total: 30)
	MW 5:00pm - 6:15pm	TWS 1107

ENGL282 How Rhetoric Works: Persuasive Power and Strategies

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO General Education: DSHU

Examines how persuasion functions and influences our lives and perception, focusing on a variety of contexts: business, politics, media, law, and entertainment. Students learn persuasive and argumentative principles to understand what rhetoric is, how it works, and what it does, and to apply the knowledge to produce effective communication appropriate for their purpose, audience, and context. A wide range of persuasive media, genres, and forms will be studied to help students sharpen how they interpret and practice persuasion.

0101	Roberto Leon	Seats (Total: 30)
	MWF 1:00pm - 1:50pm	TWS 0221

ENGL289C Special Topics in English; Introduction to Health, Medicine, and Humanities

Credits: 3 Grading Method: Regular

Introduces students to notable themes and approaches in English studies. Topics vary by section and semester.

Credit only granted for: ENGL289C or ARHU230.

0101	Marybeth Shea	Seats (Total: 20)
	MWF 12:00pm - 12:50pm	TWS 0224

ENGL290 Introduction to Digital Studies

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU, DSSP

Introductory course in digital studies. Surveys contemporary humanities work in digital technologies, including the web and social media and their historical antecedents. Explores design and making as analytical tools alongside reading and writing. Situates digital media within power and politics and develops critical awareness of how media shape society and ethics. Interdisciplinary approaches to creativity, analysis, and technology. While the course will include hands-on practice, no prior experience of programming, designing, or making required other than a willingness to experiment and play.

0101	Andy Yeh	Seats (Total: 20)
	TuTh 5:00pm - 6:15pm	KEY 0121

ENGL291 Writing, Revising, Persuading

Credits: 3

Grading Method: Regular

General Education: DSHU,
DSSP*Prerequisite: Must have satisfied Fundamental Studies Academic Writing requirement.*

Intermediate-level, writing-intensive course for students who have successfully satisfied the Fundamental Studies Academic Writing requirement but wish to hone skills in analyzing and producing rhetorically attuned, well-styled prose. Deeper study of rhetorical theory and its application to a wide variety of arguments and situations. Additional writing practice, techniques of revision, study of effect of stylistic choices. Topics may include argumentation theory, visual rhetoric, stylistic theory, and writing theory.

Contact department for information to register for this course.

ENGL293 Writing in the Wireless World

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: HO

General Education: DSHU,
DSSP*Recommended: ENGL101. Credit only granted for: ENGL278Z or ENGL293. Formerly: ENGL278Z.*

A hands-on exploration of writing at the intersection of technology and rhetoric. Students will learn to read, analyze, and compose the kind of multimodal documents (combining text, image, and sound) that constitute communication in our digital world.

0101	Lyra Hilliard	Seats (Total: 22)
	MW 2:00pm - 3:15pm	TWS 1107
FC01	Paul Cote	Seats (Total: 20)
	MW 6:00pm - 7:15pm	JMZ 1122
<i>Restricted to students in Freshmen Connection.</i>		

ENGL294 Persuasion and Cleverness in Social Media

Credits: 3

Grading Method: Regular

General Education: DSHU,
DSSP*Prerequisite: Must have satisfied Fundamental Studies Academic Writing requirement.*

Exploration of various persuasive media encountered in daily life through the lens of rhetorical and critical theories. Principles of rhetoric and analysis of how persuasion functions across media. Invention of effective multimedia works appropriate to purpose, audience, and context. Concepts from cultural studies used to develop critical awareness about power and ideology and how they influence the way people produce and understand messages. By integration of technology, rhetoric, and cultural studies, students become more critically-rhetorically informed thinkers, authors, and audiences of arguments and culture in the digital age. Writing intensive course. No prior multimedia experience is expected.

0101	Alysia Sawchyn	Seats (Total: 20)
	MWF 12:00pm - 12:50pm	JMZ 3120

ENGL296

Reading and Writing Disability

Credits: 3 Grading Method: Regular, Pass-Fail General Education: DSHU, DVUP

Rhetoric-based course that locates and analyzes disability in various settings, modes, and texts. Investigates material and cultural effects of the language, stories, and myths of disability. Exploration of the many definitions and frameworks of disability. Disability as dynamic lived experiences, as a political identities, as a rich culture, as socially constructed barriers, and as an oppressed minority group. Social, medical, political, cultural, and personal definitions of disability; how disability is portrayed, controlled, stereotyped, and celebrated.

0101	Tamar Leroy	Seats (Total: 20)
	MWF 11:00am - 11:50am	TWS 0214

ENGL297

Introduction to Professional Writing

Credits: 3 Grading Method: Regular General Education: DSSP

Prerequisite: ENGL101.

Introduction to the rhetorical principles and professional practices of professional writing, particularly the research, writing, communication, analytical, and technological skills needed for the Professional Writing minor. How culture and technology relate to the work of professional writing; design principles and rhetorical moves; digital tools, research skills, and writing strategies of professional writers. Develops skills needed to publish a writing portfolio that showcases students' professional writing competencies and projects your professional writer identities.

0101	Justin Lohr	Seats (Total: 22)
	MW 2:00pm - 3:15pm	TWS 0224
0201	Alexandra Calloway	Seats (Total: 22)
	TuTh 2:00pm - 3:15pm	TWS 0232

This is English: Fields and Methods

Restriction: Must be in English Language and Literature program; or must be in Secondary Educ: English Language Arts program.

"English" means a lot of things. Are you looking for literature, or linguistics? For writing--creative, critical, or professional? For theater, or debate? For film, or even videogames? This gateway course for the English major introduces you to all of these areas and more, as well as to our discipline's unique resources for studying and enjoying them. The English discipline includes three main interpretive fields: Literary and Cultural Studies; Language, Writing, and Rhetoric; and Media Studies. This course brings together the fundamental concepts and methods for reading, viewing, and researching practiced in these fields, launching you into English studies and helping you to choose the major track that is right for you.

0101	John Macintosh TuTh 11:00am - 12:15pm	Seats (Total: 18) TWS 3132
0201	Blake Wilder MWF 12:00pm - 12:50pm	Seats (Total: 18) TWS 3132
0401	Randy Ontiveros TuTh 12:30pm - 1:45pm	Seats (Total: 18) TWS 3132
0501	Sharada Balachandran Orihuela TuTh 2:00pm - 3:15pm	Seats (Total: 18) TWS 3132
0701	Julius Fleming MW 2:00pm - 3:15pm	Seats (Total: 18) TWS 3132

Medieval Literature in Translation

Surveys major works of English and continental Middle Ages. Readings may include romance, lyric and drama, Germanic epic, works of Dante, Chretien de Troyes, Jean de Meun, Christine de Pisan, Malory, English and continental mystics.

Contact department for information to register for this course.

Early Drama

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Explore medieval and Renaissance drama and performance, placing the Shakespearean stage in its cultural and historical contexts.

0101	Karen Nelson	Seats (Total: 25)
	TuTh 5:00pm - 6:15pm	TWS 0201

ENGL310 Medieval and Renaissance British Literature

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Detailed study of selected major medieval and Renaissance works written in England. Cultural attitudes and historical contexts. May include Beowulf, Anglo-Saxon lyric, drama, sonnets; works of women writers, Chaucer, Spenser, Sidney. Some readings in Middle English.

0101	Thomas Moser	Seats (Total: 28)
	TuTh 9:30am - 10:45am	TWS 0205

ENGL312 Romantic to Modern British Literature

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Detailed study of selected major texts from the 19th and 20th centuries. Transitions from Romanticism to Victorian age to Modernism. Historical, social, literary contexts. Issues such as rise of democracy; industrial revolution; the "woman question"; revolutions in literary form. Authors might include Wordsworth, Austen, Dickens, Arnold, T.S. Eliot, and Woolf.

0101	Orrin Wang	Seats (Total: 28)
	MW 3:30pm - 4:45pm	TWS 1106

ENGL313 American Literature

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A detailed study of selected major texts of American literature from the 17th century to the 20th century. Issues such as race, gender, and regionalism. Authors such as Franklin, Hawthorne, Dickinson, Hemingway, and Morrison.

0201	Cheryl Spinner	Seats (Total: 28)
	TuTh 3:30pm - 4:45pm	TWS 1107

ENGL316 Native American Literature

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSHU

Examines literature that explores the experiences and cultures of America's Indigenous peoples from the sixteenth century to the contemporary moment. We will analyze poetry, historical accounts, oral narratives, short stories, and novels by Native American writers in order to explore key concerns in Native American Studies, such as dilemmas of Indigenous sovereignty, settler colonialism, the settler state, stolen land, and the natural environment.

0101	Chad Infante	Seats (Total: 28)
	TuTh 2:00pm - 3:15pm	TWS 1106

ENGL327 The Suburbs in American Literature and Film

Credits: 3 Grading Method: Regular,
Pass-Fail General Education: DSHU,
DVUP

Explores through written expression and through cinema the diverse and changing world of US suburbia. Premised on two arguments: (1) the suburbs embody many of the contours and contradictions of American life; and (2) the suburbs are far more racially, ethnically, culturally, sexually, economically diverse than mass media suggests. Investigation via prose, poetry, drama, and cinema, as well as secondary sources in sociology, women's studies, ethnic studies, history, cultural studies, psychology, anthropology, and the history of science and technology.

0101	Randy Ontiveros	Seats (Total: 28)
	TuTh 9:30am - 10:45am	TWS 1106

ENGL329C Special Topics in Film Studies; Sexuality in the Cinema

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Studies in various periods and genres of film.

Cross-listed with CMLT398L. Credit will be granted for only one of the following: CMLT398L, CMLT498L, or ENGL329C.

0101	Eugene Robinson	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

ENGL329J Special Topics in Film Studies; The Films of Alfred Hitchcock

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Studies in various periods and genres of film.

Prerequisite: ENGL245, FILM245, FILM283, or SLLC283; or permission of instructor. Cross-listed with FILM345. Credit only granted for FILM345 or ENGL329J.

0101	Marianne Conroy	Seats (Total: 30)
	MW 2:00pm - 3:15pm	TWS 1320

ENGL329V Special Topics in Film Studies; Presentations of London in Modern European Literature Film and Fine Art

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Studies in various periods and genres of film.

Contact department for information to register for this course.

ENGL344 Nineteenth-Century Fiction

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Major British, American, and other fiction writers of the nineteenth century studied in the context of the broad global, intellectual, and artistic interests of the century.

Contact department for information to register for this course.

ENGL349J Asian American Literatures; New World Arrivals: Literature of Asian American Migration and Diaspora

Credits: 3 Grading Method: Regular, , D
Pass-Fail, Audit

Study of selected writers, particular themes, or genres in Asian American literatures.

Cross-listed with AAST398J. Credit only granted for ENGL349J or AAST398J .

0101	Edlie Wong	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	TWS 0236

ENGL352 Intermediate Fiction Workshop

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: Minimum grade of A- in ENGL271; or minimum grade of A- in ENGL272; or permission of ARHU-English department. Credit only granted for: ENGL396 or ENGL352. Formerly: ENGL396.

A class in the making of fiction. Intensive discussion of students' own fiction. Readings include both fiction and essays about fiction by practicing writers. Writing short critical papers, responding to works of fiction, and the fiction of colleagues, in-class writing exercises, intensive reading, and thinking about literature, in equal parts, and attendance at readings.

0101	Gail Upchurch M 3:30pm - 6:00pm	Seats (Total: 15) TWS 3250
0301	Rion Scott W 3:30pm - 6:00pm	Seats (Total: 15) TWS 3134

ENGL353 Intermediate Poetry Workshop

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: Minimum grade of A- in ENGL271; or minimum grade of A- in ENGL273; or permission of ARHU-English department. Credit only granted for: ENGL397 or ENGL353. Formerly: ENGL397.

A class in the making of poetry. Intensive discussion of students' own poems. Readings in both poetry and essays about poetry by practicing poets. Writing short critical prose pieces, responding critically to colleagues' poems, in-class and outside writing exercises, memorization, and attendance at poetry readings.

0101	Lindsay Bernal Tu 3:30pm - 6:00pm	Seats (Total: 15) TWS 3136
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ENGL358D Special Topics in U.S. Latinx Literature; Cuban Poetry & Fiction Post-1980

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topical study of selected works by U.S. Latinx writers.

Contact department for information to register for this course.

ENGL359F Lesbian, Gay, Bisexual, and Transgender Film and Video

Credits: 3 Grading Method: Regular, General Education: DSHU,
Pass-Fail, Audit DVUP

Restriction: Junior standing or higher. Cross-listed with: LGBT327. Credit only granted for: LGBT327 or ENGL359F.

Comparative analysis of forms, themes, and the politics of representation in film and video by and/or about LGBT people.

Cross-listed with LGBT327. Credit granted for ENGL359F or LGBT327.

0101	Ivan Ramos	Seats (Total: 30)
	TuTh 5:00pm - 6:15pm	TYD 0101

ENGL360 African, Indian and Caribbean Writers

Credits: 3 Grading Method: Regular, Pass-Fail, Audit, D

Selected writers from countries formerly colonies of Britain, France, Denmark, etc. Attention to ways regions have developed distinctive political and aesthetic values resulting from indigenous traditions and foreign influences.

0201	Sangeeta Ray	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	TWS 3136

ENGL362 Caribbean Literature in English

Credits: 3 Grading Method: Regular, Pass-Fail, Audit, D General Education: DSHU, DVUP

Cross-listed with: LASC348E. Credit only granted for: ENGL362 or LASC348E.

Political and literary traditions that intersect in the fiction, poetry, and drama written in English by Caribbean writers, primarily during the 20th century.

Cross-listed with LASC348E. Credit granted for ENGL362 or LASC348E.

0101	Merle Collins	Seats (Total: 20)
	TuTh 9:30am - 10:45am	TWS 1321

ENGL368B Special Topics in the Literature of Africa and the African Diaspora; Blues and African American Folksong

Credits: 3 Grading Method: Regular, Pass-Fail, Audit, D

Comparisons among the literary traditions in Africa, the Caribbean, and North and South America.

0201	Benjamin Baker, Barry Pearson	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	TWS 0201

ENGL368D Special Topics in the Literature of Africa and the African Diaspora; African American Folklore and Literature

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit , D

Comparisons among the literary traditions in Africa, the Caribbean, and North and South America.

0201	Barry Pearson, Laura Williams	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	TWS 0201

ENGL369 Special Topics in Study Abroad III

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369A Special Topics in Study Abroad III; The Scene of Reading

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369B Special Topics in Study Abroad III; Representing London: The Eighteenth Century I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369C Special Topics in Study Abroad III; The Dickens City I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369D Special Topics in Study Abroad III; Writing the First World War

Credits: 3 Grading Method: Regular, General Education: DSHU,
Pass-Fail, Audit DVCC

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369E Special Topics in Study Abroad III; The Crisis of Culture: Literature and Politics 1918-1948

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369F Special Topics in Study Abroad III; British Drama from the 1950s to the Present

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369G Special Topics in Study Abroad III; Adapting Literature to Screen

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369H Special Topics in Study Abroad III; London Stage

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369K Special Topics in Study Abroad III; Great Directors

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369L Special Topics in Study Abroad III; Angloamerican Travelers in Spain

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369Q Special Topics in Study Abroad III; Literature of the Shoah

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL369Z Special Topics in Study Abroad III; The London Stage

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL373 Senior Honors Project

(Perm req)

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENGL370. Restriction: Must be in English Language and Literature program.

Research and writing of senior honors project. Strongly recommended for students planning graduate work.

0101	Jason Rudy	Seats (Total: 20)
	M 3:30pm - 5:30pm	TWS 3252

ENGL375 J.R.R. Tolkien: Middle-earth and Beyond

Credits: 3 Grading Method: Regular, General Education: DSHU
Pass-Fail, Audit

Credit only granted for: ENGL375 or ENGL479D. Formerly: ENGL479D.

An in-depth look at major themes and ideas spanning Tolkien's well-known and lesser-known works across a variety of genres and styles. We will study "The Hobbit" and "The Lord of the Rings" in connection with Tolkien's back-story mythology expressed in "The Silmarillion." We will also consider film adaptations and other popular fantasy influenced by Tolkien. And we will explore lesser-known works such as "Farmer Giles of Ham," and Tolkien's essays on fairy stories and on "Beowulf."

0101	Christopher Crane	Seats (Total: 28)
	MWF 12:00pm - 12:50pm	TWS 0214

ENGL377 Medieval Myth and Modern Narrative

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Formerly: ENGL361.

Literary patterns characteristic of medieval myth, epic, and romance; their continuing vitality in modern works; and links between Medieval works like "The Prose Edda", "Beowulf", "The Morte D'Arthur", "The Volsunga Saga", and "Grettis Saga" and modern narratives like Tolkien's "The Lord of the Rings".

0101	Christopher Crane	Seats (Total: 28)
	MWF 1:00pm - 1:50pm	TWS 0205

ENGL378E Special Topics in English; Videogames and Game Studies

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Offers sustained attention to notable current themes and approaches in English studies. Topics vary by section and semester.

Students are encouraged to bring laptops to class meetings.

0101	Andrew Ferguson	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	TWS 0214

ENGL378F Special Topics in English; Paranoia, Conspiracies, and Fake News

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Offers sustained attention to notable current themes and approaches in English studies. Topics vary by section and semester.

0101	Andrew Ferguson	Seats (Total: 25)
	TuTh 5:00pm - 6:15pm	TWS 0214

ENGL378I Special Topics in English; Graphic Novels by People of Color

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Offers sustained attention to notable current themes and approaches in English studies. Topics vary by section and semester.

0101	Sharada Balachandran Orihuela	Seats (Total: 28)
	TuTh 5:00pm - 6:15pm	TWS 1106

ENGL379V Special Topics in Literature; Gypsy Culture

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with CMLT398N. Credit will be granted for only one of the following: CMLT398N, CMLT498N, or ENGL379V.

0101	Eugene Robinson	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

ENGL381 MGA Legislative Seminar

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail General Education: FSPW

Prerequisite: Students who have taken courses with comparable content may contact the department; or ENGL101. Restriction: Permission of ARHU-English department. Additional information: Application required. Contact english@umd.edu for more information.

Prepares students to intern for the Maryland General Assembly. Introduces standard legislative genres and assigns extended practice in researching legislative issues.

Cross-listed with HONR368A. Credit only granted for one of the following : ENGL381 or HONR368A. Admission to this course is by application only. [Click here for more details.](#)

0101	Thomas Lowderbaugh	Seats (Total: 15)
	Tu 3:30pm - 6:00pm	TWS 0232

ENGL383 Language in Its Social Contexts

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Exploration of the social and political aspects of language use, including interactional behavior, the structure of conversation, persuasive uses of language, social dialects, language use within speech communities, and language and identity. We will examine and compare analytical approaches to pragmatics and discourse analysis.

0101	Michael Israel	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	TWS 0236

ENGL384 Concepts of Grammar

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Introduction to the basic units of grammatical description; motivation for and nature of constituent structure and syntactic categories; fundamental grammatical concepts employed in the teaching and learning of languages.

0101	Michael Israel	Seats (Total: 25)
	TuTh 9:30am - 10:45am	TWS 3132

ENGL388A Writing, Research, and Media Internships; Second Life Workshop in African American Literature

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail

Field work in English studies.

Contact department for information to register for this course.

ENGL388D Writing, Research, and Media Internships; Dickinson Electronic Archives

(Perm req)

Credits: 1-6 Grading Method: Regular,
Pass-Fail

Field work in English studies.

Prerequisite: permission of department. Repeatable to 12 credits.

0101	Martha Nell Smith	Seats (Total: 5)
	Contact instructor or department for details.	

ENGL388P Writing, Research, and Media Internships; Pre-professional Writing Skills Internship

(Perm req)

Credits: 1-6 Grading Method: Regular General Education: DSSP

Field work in English studies.

Prerequisite: permission of department. Repeatable to 12 credits.

0101	Karen Lewis	Seats (Total: 15)
	Contact instructor or department for details.	

ENGL388T Writing, Research, and Media Internships; Maryland Institute for Technology in the Humanities Internships

(Perm req)

Credits: 1-3 Grading Method: Regular

Field work in English studies.

Prerequisite: permission of department. Repeatable to 12 credits.

0101	Purdom Lindblad	Seats (Total: 5)
	Contact instructor or department for details.	

ENGL388V

Writing, Research, and Media Internships; Undergraduate Teaching Assistants in English

(Perm req)

Credits: 1-6

Grading Method: Regular,
Pass-Fail

General Education: DSSP

Field work in English studies.

Prerequisite: permission of department. Repeatable to 12 credits. Contact Lyra Hilliard, lyrahill@umd.edu. Students taking ENGL388V for the first time should register for section 0101 or 0401 for 4 credits. When taking the course again in subsequent semesters, students should register for 2001 or 3001 for 3 credits.

0101	Katherine Joshi	Seats (Total: 20)
	W 3:30pm - 5:00pm	TWS 1320
0401	Lyra Hilliard	Seats (Total: 20)
	Tu 3:30pm - 5:00pm	TWS 1320
2001	Katherine Joshi	Seats (Total: 10)
	Contact instructor or department for details.	
3001	Lyra Hilliard	Seats (Total: 10)
	Contact instructor or department for details.	

ENGL388W

Writing, Research, and Media Internships; Writing Center Internship

(Perm req)

Credits: 1-6

Grading Method: Regular

General Education: DSSP

Field work in English studies.

Prerequisite: permission of department. Repeatable to 12 credits. To apply, go to <http://www.english.umd.edu/academics/writingcenter/internship> Students taking ENGL388W for the first time should register for section 0101 for 4 credits. When taking the course again in subsequent semesters, students should register for 2001.

0101	Thomas Earles	Seats (Total: 20)
	M 3:30pm - 6:00pm	TWS 3136
	Contact instructor or department for details.	
	<i>Students registering for 0101 should register for four credits.</i>	
2001	Thomas Earles	Seats (Total: 4)
	Contact instructor or department for details.	

ENGL390**Science Writing**

Credits: 3

Grading Method: Regular

General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits; and junior standing or higher. Credit only granted for: ENGL390 or ENGL393S. Formerly: ENGL393S.

Specifically designed for students interested in further study in the physical and biological sciences. Exposes students to the conventions of scientific prose in the genres of research articles and proposals. Students learn to accommodate scientific information to general audiences.

[Click here for more course information.](#)

0301	Katherine Oneill MWF 11:00am - 11:50am	Seats (Total: 19) TWS 0223
0401	Katherine Oneill MWF 12:00pm - 12:50pm	Seats (Total: 19) TWS 0223
0501	Katherine Oneill MWF 1:00pm - 1:50pm	Seats (Total: 19) TWS 0223
1501	Robin Allen-Klein TuTh 3:30pm - 4:45pm	Seats (Total: 19) TWS 0224
1505	Robin Allen-Klein TuTh 5:00pm - 6:15pm	Seats (Total: 19) TWS 0207
1601	Richard Reynnells Tu 6:30pm - 9:10pm	Seats (Total: 19) TWS 1106
1801	Richard Reynnells W 6:30pm - 9:10pm	Seats (Total: 19) TWS 0234
9001	Kate Wilson Class time/details on ELMs	Seats (Total: 19) ONLINE
9002	Kate Wilson Class time/details on ELMs	Seats (Total: 19) ONLINE

ENGL390H**Science Writing**

Credits: 3

Grading Method: Regular

General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits; and junior standing or higher. Credit only granted for: ENGL390 or ENGL393S. Formerly: ENGL393S.

Specifically designed for students interested in further study in the physical and biological sciences. Exposes students to the conventions of scientific prose in the genres of research articles and proposals. Students learn to accommodate scientific information to general audiences.

Restricted to students in the University or departmental Honors program.

0101	Marybeth Shea MWF 9:00am - 9:50am	Seats (Total: 19) TWS 0224
0201	Marybeth Shea MWF 10:00am - 10:50am	Seats (Total: 19) TWS 0224
0301	Robert Lucci MWF 11:00am - 11:50am	Seats (Total: 19) TWS 0224

ENGL391

Advanced Composition

Credits: 3

Grading Method: Regular

General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

An advanced composition course which emphasizes constructing written arguments accommodated to real audiences.

[Click here for more course information.](#)

0401	Mark Forrester MWF 12:00pm - 12:50pm	Seats (Total: 19) TWS 1105
0402	Anna Szczepaniec-Bialas MWF 12:00pm - 12:50pm	Seats (Total: 19) TWS 0232
0501	Anna Szczepaniec-Bialas MWF 1:00pm - 1:50pm	Seats (Total: 19) TWS 0232
0601	Tom Hatcher MW 2:00pm - 3:15pm	Seats (Total: 19) ASY 3221

0701	Tom Hatcher MW 3:30pm - 4:45pm	Seats (Total: 19) TWS 0205
1101	Justin Thompson TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 1105
1201	Jesse Brooks TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 1105
1301	Thomas Earles TuTh 12:30pm - 1:45pm	Seats (Total: 19) TWS 1105
1701	Mark Fitzgerald Tu 6:30pm - 9:10pm	Seats (Total: 19) TWS 0224
1901	Robert Crane Th 6:30pm - 9:10pm	Seats (Total: 19) TWS 1106
6101	Tom Hatcher MF 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 19) KNI 1105 ONLINE
6102	Catherine Bayly MF 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 19) ATL 0201 ONLINE
9001	Ann Mason Class time/details on ELMs	Seats (Total: 19) ONLINE
9002	Ann Mason Class time/details on ELMs	Seats (Total: 19) ONLINE
9003	Ann Mason Class time/details on ELMs	Seats (Total: 19) ONLINE
9004	Kate Wilson Class time/details on ELMs	Seats (Total: 19) ONLINE
9005	Daune O'Brien Class time/details on ELMs	Seats (Total: 19) ONLINE

9006	Kate Wilson	Seats (Total: 19)
	Class time/details on ELMs	ONLINE

ENGL391H **Advanced Composition**

Credits: 3

Grading Method: Regular

General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

An advanced composition course which emphasizes constructing written arguments accommodated to real audiences.

For students in the University or departmental Honors program.

[Click here for more course information.](#)

0201	Mark Forrester	Seats (Total: 19)
	MWF 10:00am - 10:50am	TWS 0234

ENGL392 **Legal Writing**

Credits: 3

Grading Method: Regular

General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

Conventions of legal writing and research. Students learn how to read and write about cases, statutes or other legislation; how to apply legal principles to fact scenarios; and how to present a written analysis for readers in the legal profession. Assignments may include the law-school application essay, case briefs, legal memos, and client letters.

[Click here for more course information.](#)

1101	Kelly Hebron	Seats (Total: 19)
	TuTh 9:30am - 10:45am	KNI 1103
1201	Erica Smith	Seats (Total: 19)
	TuTh 11:00am - 12:15pm	JMZ 1124
1301	John Kim	Seats (Total: 19)
	TuTh 12:30pm - 1:45pm	ATL 0201
1401	John Kim	Seats (Total: 19)
	TuTh 2:00pm - 3:15pm	CCC 1105

1601	Michael Winett M 6:30pm - 9:10pm	Seats (Total: 19) TWS 0232
1701	Michael Winett Tu 6:30pm - 9:10pm	Seats (Total: 19) TWS 0232
1801	Michael Winett W 6:30pm - 9:10pm	Seats (Total: 19) TWS 0232

ENGL393

Technical Writing

Credits: 3

Grading Method: Regular

General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

The writing of technical papers and reports.

[Click here for more course information.](#)

0001	Patrick Nelson MWF 8:00am - 8:50am	Seats (Total: 19) TWS 0221
0102	Alysia Sawchyn MWF 9:00am - 9:50am	Seats (Total: 19) TWS 1105
0201	Kelly Hebron MWF 10:00am - 10:50am	Seats (Total: 19) EDU 3233
0202	Alysia Sawchyn MWF 10:00am - 10:50am	Seats (Total: 19) TWS 0207
0301	Martha Thomas MWF 11:00am - 11:50am	Seats (Total: 19) TWS 0207
0303	Elliot Berger MWF 11:00am - 11:50am	Seats (Total: 19) TWS 0234
0401	Elliot Berger MWF 12:00pm - 12:50pm	Seats (Total: 19) TWS 0234
0403	Martha Thomas MWF 12:00pm - 12:50pm	Seats (Total: 19) EDU 3236

0701	Katherine Oneill MW 3:30pm - 4:45pm	Seats (Total: 19) TWS 1105
0801	Alysia Sawchyn MW 5:00pm - 6:15pm	Seats (Total: 19) TWS 0234
1001	Elizabeth McClure TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 1313
1101	Danuta Hinc TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 0223
1102	Alexandra Calloway TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 0234
1201	Danuta Hinc TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 0223
1202	Elizabeth McClure TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 0230
1402	Elizabeth McClure TuTh 2:00pm - 3:15pm	Seats (Total: 19) TWS 0234
1505	Mark Fitzgerald TuTh 5:00pm - 6:15pm	Seats (Total: 19) TWS 0223
1602	Kelly Cresap M 6:30pm - 9:10pm	Seats (Total: 19) TWS 0234
1603	Mrim Boutla M 6:30pm - 9:10pm	Seats (Total: 19) TWS 0221
1702	Eric Bond Tu 6:30pm - 9:10pm	Seats (Total: 19) TWS 0223
1801	Kelly Cresap W 6:30pm - 9:10pm	Seats (Total: 19) TWS 1107
1803	Mark Fitzgerald W 6:30pm - 9:10pm	Seats (Total: 19) TWS 0230

1901	Aysha Jawed Th 6:30pm - 9:10pm	Seats (Total: 19) TWS 0223
1902	Mark Fitzgerald Th 6:30pm - 9:10pm	Seats (Total: 19) TWS 0230
9001	Michelle Von Euw Class time/details on ELMs	Seats (Total: 19) ONLINE
9002	Michelle Von Euw Class time/details on ELMs	Seats (Total: 19) ONLINE
9003	Michelle Von Euw Class time/details on ELMs	Seats (Total: 19) ONLINE
9004	David Miles Class time/details on ELMs	Seats (Total: 19) ONLINE
9005	David Miles Class time/details on ELMs	Seats (Total: 19) ONLINE
9006	David Miles Class time/details on ELMs	Seats (Total: 19) ONLINE
9007	David Miles Class time/details on ELMs	Seats (Total: 19) ONLINE
9008	Daniel Saalfeld Class time/details on ELMs	Seats (Total: 19) ONLINE
9009	Daniel Saalfeld Class time/details on ELMs	Seats (Total: 19) ONLINE
9010	Daniel Saalfeld Class time/details on ELMs	Seats (Total: 19) ONLINE
9011	Daniel Saalfeld Class time/details on ELMs	Seats (Total: 19) ONLINE
9012	Sheila Lalwani Class time/details on ELMs	Seats (Total: 19) ONLINE

9013	Sheila Lalwani Class time/details on ELMs	Seats (Total: 19) ONLINE
9014	Sheila Lalwani Class time/details on ELMs	Seats (Total: 19) ONLINE
9015	Sheila Lalwani Class time/details on ELMs	Seats (Total: 19) ONLINE
9016	Phillip Moses Class time/details on ELMs	Seats (Total: 19) ONLINE
9017	Phillip Moses Class time/details on ELMs	Seats (Total: 19) ONLINE
9018	Sarah Dammeyer Class time/details on ELMs	Seats (Total: 19) ONLINE
9019	Sarah Dammeyer Class time/details on ELMs	Seats (Total: 19) ONLINE
9020	Sajeela Yaqub Class time/details on ELMs	Seats (Total: 19) ONLINE
9021	Sajeela Yaqub Class time/details on ELMs	Seats (Total: 19) ONLINE
9022	Andrew Delfino Class time/details on ELMs	Seats (Total: 19) ONLINE
9023	Andrew Delfino Class time/details on ELMs	Seats (Total: 19) ONLINE
9024	Ann Mason Class time/details on ELMs	Seats (Total: 19) ONLINE
9026	Dennis Winston Class time/details on ELMs	Seats (Total: 19) ONLINE
9027	Dennis Winston Class time/details on ELMs	Seats (Total: 19) ONLINE

ENGL393H Technical Writing

Credits: 3

Grading Method: Regular

General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

The writing of technical papers and reports.

Restricted to students in the University or departmental Honors program.

Click here for more course information.

0401	Peter Witte	Seats (Total: 19)
	MWF 12:00pm - 12:50pm	JMZ 3203

ENGL393Q Technical Writing

Credits: 3

Grading Method: Regular

General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

The writing of technical papers and reports.

3001	Alexandra Calloway	Seats (Total: 19)
	F 9:00am - 11:40am	TWS 3252
<i>The writing of technical papers and reports with additional service learning hours required to be completed as part of the course.</i>		

ENGL393X Technical Writing

(Perm req)

Credits: 3

Grading Method: Regular

General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

The writing of technical papers and reports.

Limited to students for whom English is a second language and who have a score below any of the following: SAT Verbal 400, TOEFL 575, CELT 250. Students who have received an "A" in ENGL 101 or its equivalent cannot register for ENGL 393X.

Click here for more course information.

1501	Danuta Hinc	Seats (Total: 15)
	TuTh 3:30pm - 4:45pm	TWS 0223

ENGL394

Business Writing

Credits: 3

Grading Method: Regular

General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

Intensive practice in the forms of written communication common in the business world-letters, memos, short reports, and proposals. Principles of rhetoric and effective style.

[Click here for more course information.](#)

0101	Elliot Berger	Seats (Total: 19)
	MWF 9:00am - 9:50am	TWS 0207
0102	Robert Oliver	Seats (Total: 19)
	MWF 9:00am - 9:50am	TWS 0223
0201	Robert Oliver	Seats (Total: 19)
	MWF 10:00am - 10:50am	TWS 0223
0301	Blake Wilder	Seats (Total: 19)
	MWF 11:00am - 11:50am	VMH 1107
0302	Robert Oliver	Seats (Total: 19)
	MWF 11:00am - 11:50am	TWS 0230
0401	Tom Hatcher	Seats (Total: 19)
	MWF 12:00pm - 12:50pm	JMZ 0120
0402	Brandee Pettus	Seats (Total: 19)
	MWF 12:00pm - 12:50pm	KEY 0124
0403	Carol Cron	Seats (Total: 19)
	MWF 12:00pm - 12:50pm	TWS 0221
0404	Robert Oliver	Seats (Total: 19)
	MWF 12:00pm - 12:50pm	TWS 0207

0501	Radford Skudrna MWF 1:00pm - 1:50pm	Seats (Total: 19) TWS 0230
0601	Radford Skudrna MW 2:00pm - 3:15pm	Seats (Total: 19) TWS 0230
0701	Ceil Goldberg MW 3:30pm - 4:45pm	Seats (Total: 19) TWS 0230
0801	Anna Szczepaniec-Bialas MW 5:00pm - 6:15pm	Seats (Total: 19) TWS 0224
0802	Charles Jones MW 5:00pm - 6:15pm	Seats (Total: 19) TWS 0201
1201	Adam Lloyd TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 0234
1202	Joseph Angelella TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 1320
1301	Adam Lloyd TuTh 12:30pm - 1:45pm	Seats (Total: 19) TWS 0234
1303	Thomas Lowderbaugh TuTh 12:30pm - 1:45pm	Seats (Total: 19) TWS 0232
1501	Daune O'Brien TuTh 3:30pm - 4:45pm	Seats (Total: 19) TWS 0234
1505	Joseph Angelella TuTh 5:00pm - 6:15pm	Seats (Total: 19) TWS 1105
1506	Erica Cochran TuTh 5:00pm - 6:15pm	Seats (Total: 19) TWS 1107
1508	Erica Cochran TuTh 6:30pm - 7:45pm	Seats (Total: 19) TWS 1107
1701	Jonathan Rick Tu 6:30pm - 9:10pm	Seats (Total: 19) TWS 0207

1902	Patrick Nelson Th 6:30pm - 9:10pm	Seats (Total: 19) TWS 0207
3001	Ellen Blumner F 9:00am - 11:40am	Seats (Total: 19) TWS 3132
9004	Clare Parsons Class time/details on ELMs	Seats (Total: 19) ONLINE
9005	Clare Parsons Class time/details on ELMs	Seats (Total: 19) ONLINE
9006	Clare Parsons Class time/details on ELMs	Seats (Total: 19) ONLINE
9007	Daune O'Brien Class time/details on ELMs	Seats (Total: 19) ONLINE
9008	Karen Angeline Class time/details on ELMs	Seats (Total: 19) ONLINE
9009	Karen Angeline Class time/details on ELMs	Seats (Total: 19) ONLINE
9010	Karen Angeline Class time/details on ELMs	Seats (Total: 19) ONLINE
9011	Karen Angeline Class time/details on ELMs	Seats (Total: 19) ONLINE
9012	Pamela Orel Class time/details on ELMs	Seats (Total: 19) ONLINE
9013	Pamela Orel Class time/details on ELMs	Seats (Total: 19) ONLINE
9014	Pamela Orel Class time/details on ELMs	Seats (Total: 19) ONLINE
9015	Pamela Orel Class time/details on ELMs	Seats (Total: 19) ONLINE

9016	Daune O'Brien Class time/details on ELMs	Seats (Total: 19) ONLINE
ESG1	Katherine Robinson Tu 8:00am - 10:45am <i>Registration is restricted to Information Science-Shady Grove students.</i>	Seats (Total: 19) BLD2 3022
ESG2	Katherine Robinson MW 9:30am - 10:45am <i>Restricted to COMM majors at Shady Grove.</i>	Seats (Total: 19) BLD3 2203
SG91	Holly Smith TuTh 11:00am - 12:15pm <i>Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>	Seats (Total: 17) BLD2 3022
SG92	Holly Smith TuTh 12:30pm - 1:45pm <i>Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>	Seats (Total: 18) BLD2 3022
SG93	Katherine Robinson TuTh 12:30pm - 1:45pm <i>Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>	Seats (Total: 18) BLD2 3062
SG95	Joseph Wappel MW 11:00am - 12:15pm <i>Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove</i>	Seats (Total: 17) BLD2 2062
SG96	Joseph Wappel MW 12:30pm - 1:45pm <i>Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove.</i>	Seats (Total: 18) BLD2 2032

SG97	Katherine Robinson	Seats (Total: 18)
	MW 12:30pm - 1:45pm	BLD2 3012
<i>Restricted to BMGT-Shady Grove Juniors. Other students may request enrollment on a space available basis. UMCP undergraduate BMGT students are not eligible to enroll at Shady Grove."</i>		

ENGL395

Writing for Health Professions

Credits: 3

Grading Method: Regular

General Education: FSPW

Prerequisite: ENGL101; or students who have taken courses with comparable content may contact the department. Restriction: Must have earned a minimum of 60 credits.

Focus on accommodating technical material and empirical studies to lay audiences, and helping writers to achieve stylistic flexibility and correctness.

[Click here for more course information.](#)

0101	James Goodwin, Christopher Crane	Seats (Total: 19)
	MWF 9:00am - 9:50am	TWS 0234
0201	Robert Lucci, James Goodwin	Seats (Total: 19)
	MWF 10:00am - 10:50am	TWS 1105
0301	Justin Lohr	Seats (Total: 19)
	MWF 11:00am - 11:50am	JMZ 1122
0401	James Goodwin, Michelle Moncrieffe	Seats (Total: 19)
	MWF 12:00pm - 12:50pm	TWS 0205
0501	James Goodwin, Peter Witte	Seats (Total: 19)
	MWF 1:00pm - 1:50pm	TWS 0207
0601	Michael Schmidt	Seats (Total: 19)
	MW 2:00pm - 3:15pm	TWS 1105
0602	Peter Witte	Seats (Total: 19)
	MWF 2:00pm - 2:50pm	TWS 1313
0801	Michael Schmidt	Seats (Total: 19)
	MW 5:00pm - 6:15pm	TWS 1105

0901	Michael Schmidt MW 6:30pm - 7:45pm	Seats (Total: 19) TWS 1321
1001	Zachary Frank TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 0205
1101	Michelle Moncrieffe TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 0214
1201	Michelle Moncrieffe TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 0207
1301	Kisa Lape TuTh 12:30pm - 1:45pm	Seats (Total: 19) TWS 0230
1402	Kisa Lape TuTh 2:00pm - 3:15pm	Seats (Total: 19) TWS 0230
1501	Kisa Lape TuTh 3:30pm - 4:45pm	Seats (Total: 19) TWS 0230
1502	Zachary Frank TuTh 3:30pm - 4:45pm	Seats (Total: 19) KNI 1105
1505	Nicole Cuffy TuTh 5:00pm - 6:15pm	Seats (Total: 19) TWS 0234
1506	Kisa Lape TuTh 5:00pm - 6:15pm	Seats (Total: 19) TWS 0230
1507	Nicole Cuffy TuTh 6:30pm - 7:45pm	Seats (Total: 19) TWS 1320
1701	Zachary Frank Tu 6:30pm - 9:10pm	Seats (Total: 19) TWS 1313

Professional writing courses that focus on the audiences, conventions, and genres of particular disciplines, professions, or organizations. Examples include writing for the arts, writing case studies and investigative reports, writing about economics, and writing for non-profit organizations.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement. Not open to students who have completed ENGL391A. Credit will be granted for only one of the following: ENGL398A or ENGL391A. Formerly ENGL391A. An advanced composition course which emphasizes writing about the arts.

1001	Caroline Wilkins TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 1107
1101	Caroline Wilkins TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 0207
1601	Kevin Tervala M 6:30pm - 9:10pm	Seats (Total: 19) TWS 1106
1701	Dennis Winston Tu 6:30pm - 9:10pm	Seats (Total: 19) TWS 1321
1801	Dennis Winston W 6:30pm - 9:10pm	Seats (Total: 19) TWS 1105

ENGL398B

Topics in Professional Writing; Writing for Social Entrepreneurship

Credits: 3

Grading Method: Regular

General Education: FSPW

Professional writing courses that focus on the audiences, conventions, and genres of particular disciplines, professions, or organizations. Examples include writing for the arts, writing case studies and investigative reports, writing about economics, and writing for non-profit organizations.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement.

0601	Eric Thiel MW 2:00pm - 3:15pm	Seats (Total: 19) TWS 0207
0701	Eric Thiel MW 3:30pm - 4:45pm	Seats (Total: 19) TWS 0234
0801	Eric Thiel MW 5:00pm - 6:15pm	Seats (Total: 19) TWS 1106

1601	Maurice Boissiere M 6:30pm - 9:10pm	Seats (Total: 19) TWS 1107
1701	Mrim Boutla Tu 6:30pm - 9:10pm	Seats (Total: 19) TWS 0201
1901	Roxanne Clements Th 6:30pm - 9:10pm	Seats (Total: 19) TWS 0201

ENGL398C

Topics in Professional Writing; Writing Case Studies and Narratives

Credits: 3

Grading Method: Regular

General Education: FSPW

Professional writing courses that focus on the audiences, conventions, and genres of particular disciplines, professions, or organizations. Examples include writing for the arts, writing case studies and investigative reports, writing about economics, and writing for non-profit organizations.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement. An advanced composition course which emphasizes writing cases and investigative reports.

0701	Nathan Tillman MW 3:30pm - 4:45pm	Seats (Total: 19) TWS 0207
0801	Nathan Tillman MW 5:00pm - 6:15pm	Seats (Total: 19) TWS 0207
1507	Nathan Tillman MW 6:30pm - 7:45pm	Seats (Total: 19) TWS 0207
SG91	Joseph Wappel TuTh 9:30am - 10:45am <i>Registration is restricted to CCJS-Shady Grove students.</i>	Seats (Total: 19) BLD3 2203
SG92	Joseph Wappel TuTh 12:30pm - 1:45pm <i>Registration is restricted to CCJS-Shady Grove students.</i>	Seats (Total: 19) BLD3 2203

ENGL398E

Topics in Professional Writing; Writing about Economics

Credits: 3

Grading Method: Regular

General Education: FSPW

Professional writing courses that focus on the audiences, conventions, and genres of particular disciplines, professions, or organizations. Examples include writing for the arts, writing case studies and investigative reports, writing about economics, and writing for non-profit organizations.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement. Not open to students who have completed ENGL394E. Credit will be granted for only one of the following : ENGL398E or ENGL394E. Formerly ENGL394E. A business writing class focusing on writing about economics.

0801	Michael Winett	Seats (Total: 19)
	MW 5:00pm - 6:15pm	TWS 0232

ENGL398L Topics in Professional Writing; Scholarly Writing in the Humanities

Credits: 3 Grading Method: Regular General Education: FSPW

Professional writing courses that focus on the audiences, conventions, and genres of particular disciplines, professions, or organizations. Examples include writing for the arts, writing case studies and investigative reports, writing about economics, and writing for non-profit organizations.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement. An advanced composition class focusing on the norms and procedures of advanced academic writing.

0301	Mark Forrester	Seats (Total: 19)
	MWF 11:00am - 11:50am	TWS 1105

ENGL398N Topics in Professional Writing; Writing for Non-Profit Organizations

Credits: 3 Grading Method: Regular General Education: FSPW

Professional writing courses that focus on the audiences, conventions, and genres of particular disciplines, professions, or organizations. Examples include writing for the arts, writing case studies and investigative reports, writing about economics, and writing for non-profit organizations.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement. Not open to students who have completed ENGL394N. Credit will be granted for only one of the following ENGL398N or ENGL394N. Formerly ENGL394N. A business writing class focusinog on writing about nonprofits.

0301	Stan Waring	Seats (Total: 19)
	MWF 11:00am - 11:50am	KEY 0119
0401	Stan Waring	Seats (Total: 19)
	MWF 12:00pm - 12:50pm	TWS 1107

0601	Stan Waring MW 2:00pm - 3:15pm	Seats (Total: 19) TWS 1106
0801	Uchechi Okereke-Beshel MW 5:00pm - 6:15pm	Seats (Total: 19) ASY 3219
1001	David Todd TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 0224
1101	David Todd TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 0224
1201	David Todd TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 0224
1301	Rebecca Holden TuTh 12:30pm - 1:45pm	Seats (Total: 19) TWS 0224
1401	Rebecca Holden TuTh 2:00pm - 3:15pm	Seats (Total: 19) TWS 0224

ENGL398R

Topics in Professional Writing; Writing Non-Fictional Narratives

Credits: 3

Grading Method: Regular

General Education: FSPW

Professional writing courses that focus on the audiences, conventions, and genres of particular disciplines, professions, or organizations. Examples include writing for the arts, writing case studies and investigative reports, writing about economics, and writing for non-profit organizations.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement.

1001	Joseph Angelella TuTh 8:00am - 9:15am	Seats (Total: 19) TWS 0232
1101	Pamela Gerhardt TuTh 9:30am - 10:45am	Seats (Total: 19) TWS 0232
1201	Pamela Gerhardt TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 0232

1401	Danuta Hinc TuTh 2:00pm - 3:15pm	Seats (Total: 19) TWS 0223
1501	Jesse Brooks TuTh 3:30pm - 4:45pm	Seats (Total: 19) TWS 0205
1505	Pamela Gerhardt TuTh 5:00pm - 6:15pm	Seats (Total: 19) TWS 0224

ENGL398V

Topics in Professional Writing; Writing about the Environment

Credits: 3

Grading Method: Regular

General Education: FSPW

Professional writing courses that focus on the audiences, conventions, and genres of particular disciplines, professions, or organizations. Examples include writing for the arts, writing case studies and investigative reports, writing about economics, and writing for non-profit organizations.

Prerequisite: 60 credits and completion of ENGL101 or equivalent. This course satisfies the professional writing requirement. Not open to students who have completed ENGL393E. Credit will be granted for only one of the following ENGL398V or ENGL393E. Formerly ENGL393E.

1201	Ruth Phillips TuTh 11:00am - 12:15pm	Seats (Total: 19) TWS 1107
1301	Ruth Phillips TuTh 12:30pm - 1:45pm	Seats (Total: 19) TWS 0214
1501	Cheryl Kiken TuTh 3:30pm - 4:45pm	Seats (Total: 19) TWS 1106
1502	Shannon Zellars Strohl TuTh 3:30pm - 4:45pm	Seats (Total: 19) JMZ 2117
1701	Shannon Zellars Strohl Tu 6:30pm - 9:10pm	Seats (Total: 19) ASY 3221
1702	Shannon Zellars Strohl Th 6:30pm - 9:10pm	Seats (Total: 19) TWS 1313

ENGL402

Chaucer

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Works read in Middle English. Readings may include Canterbury Tales, Troilus and Criseyde, dream visions, lyrics.

Contact department for information to register for this course.

ENGL409A Study Abroad Special Topics IV; Solitude in Life and Letters in Enlightenment Britain

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL409B Study Abroad Special Topics IV; Shakespeare: The Play and the Book

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL409C Study Abroad Special Topics IV; Shakespeare's Italian Plays

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL409D Study Abroad Special Topics IV; Time, Narrative and Culture (Sem A)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL409E Study Abroad Special Topics IV; The Revolution Controversy: Politics and Genre

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ENGL409F	Study Abroad Special Topics IV; Grand Tours: Nineteenth Century Adventure Stories for Young Readers and their Twentieth Century Afterlives
Credits: 3	Grading Method: Regular, Pass-Fail, Audit
	<i>Special topics course taken as part of an approved study abroad program.</i>
	Contact department for information to register for this course.
ENGL409G	Study Abroad Special Topics IV; Thomas Hardy and the Victorian Modern
Credits: 3	Grading Method: Regular, Pass-Fail, Audit
	<i>Special topics course taken as part of an approved study abroad program.</i>
	Contact department for information to register for this course.
ENGL409H	Study Abroad Special Topics IV; The Caribbean Novel
Credits: 3	Grading Method: Regular, Pass-Fail, Audit
	<i>Special topics course taken as part of an approved study abroad program.</i>
	Contact department for information to register for this course.
ENGL409I	Study Abroad Special Topics IV; The New York Century: Urban Literary Culture 1900-1999
Credits: 3-6	Grading Method: Regular, Pass-Fail, Audit
	<i>Special topics course taken as part of an approved study abroad program.</i>
	Contact department for information to register for this course.
ENGL409L	Study Abroad Special Topics IV; Literature of London
Credits: 3	Grading Method: Regular, Pass-Fail, Audit
	<i>Special topics course taken as part of an approved study abroad program.</i>
	Contact department for information to register for this course.
ENGL409P	Study Abroad Special Topics IV; Phonies, Fakes, Liars and Conmen: Readings in Fact and Fiction
Credits: 3	Grading Method: Regular, Pass-Fail, Audit
	<i>Special topics course taken as part of an approved study abroad program.</i>
	Contact department for information to register for this course.

ENGL410**Edmund Spenser**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit*Prerequisite: Two English courses in literature; or permission of ARHU-English department.**Selected works of Edmund Spenser in their literary, social, and historical contexts. Special attention to The Faerie Queene; also sonnets and lyric poetry.*

0101	Jeffrey Griswold	Seats (Total: 20)
	MWF 11:00am - 11:50am	TWS 0201

ENGL414**Milton**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit*Prerequisite: Two English courses in literature; or permission of ARHU-English department.**Poetry and major prose in their social, political, and literary-historical contexts. Special attention to Paradise Lost. Other works may include Samson Agonistes and shorter poems.***Contact department for information to register for this course.**

ENGL420**English Romantic Literature**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit*Prerequisite: Two English courses in literature; or permission of ARHU-English department.**British poetry, drama, fiction, and criticism c.1790 to c.1830, a period of dramatic social change and revolution in literature, philosophy, the arts, industry, and politics. Authors include Austen, Wordsworth, Coleridge, Keats, Byron, Percy, and Mary Shelley.***Contact department for information to register for this course.**

ENGL422A**English Victorian Literature**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit*Prerequisite: Two English courses in literature; or permission of ARHU-English department.**A survey of English literature of the Victorian period. Writers may include Arnold, Browning, Tennyson, Dickens, George Eliot, Carlyle, Ruskin, Newman, and Wilde.***Contact department for information to register for this course.**

ENGL428E Seminar in Language and Literature; The Postmodern Enlightenment

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topics will vary each semester. The course will provide a seminar experience in material or methodologies not otherwise available to the major.

Restriction: Junior standing. For ENGL majors only. Repeatable to 9 credits if content differs. Course intended primarily for students in English Honors Program. English majors with strong academic records may also apply. Permission from the Director of Honors required."

0101	Tita Chico	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	TWS 0205

ENGL429 Independent Research in English

(Perm req)

Credits: 1-6 Grading Method: Regular

An advanced independent research project for qualified students, supervised by an English faculty member, on a topic not ordinarily covered in available courses.

Prerequisite: ENGL301 and two English courses, excluding Fundamental Studies requirement.

Contact department for information to register for this course.

ENGL439D Spotlight on Major Writers; Dickinson, Whitman, Erotics, and American Poetry

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An intensive study of a single writer, or a handful of writers, to understand the shifts in the writer's craft and cultural influence, both past and present.

Cross-listed with LGBT448Y and WMST498Y. Credit only granted for ENGL439 D,LGBT448Y, or WMST498Y.

0101	Martha Nell Smith	Seats (Total: 17)
	TuTh 2:00pm - 3:15pm	TWS 0201

ENGL439M Spotlight on Major Writers; Major American Writers After 1865

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An intensive study of a single writer, or a handful of writers, to understand the shifts in the writer's craft and cultural influence, both past and present.

Contact department for information to register for this course.

ENGL444**Feminist Critical Theory**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: WMST200, WMST250, or ENGL250. Cross-listed with WMST444. Credit only granted for: ENGL444 or WMST444.

Issues in contemporary feminist thought that have particular relevance to textual studies, such as theories of language, literature, culture, interpretation, and identity.

Contact department for information to register for this course.

ENGL448A**Literature by Women of Color; Caribbean Literature by Women**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Literature by women of color in the United States, Britain, and in colonial and post-colonial countries.

Prerequisite: two English courses in literature or permission of department. Repeatable to 9 credits, if content differs. Also offered as LASC448A and WMST448A. Credit only offered for ENGL448A, LASC448A or WMST448A.

0101	Merle Collins	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	TWS 0221

ENGL454**Modern Drama**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

The history of modern British drama, from its roots in Chekhov and Ibsen, through the modernisms of Samuel Beckett and Bertolt Brecht, through the Angry Young Men of the 1950s, and right up to the present. Most plays will be from the last 40 years, by writers such as David Hare, Tom Stoppard, Lucy Kirkwood, Caryl Churchill, Roy Williams, Lucy Prebble, Alan Bennett, Brian Friel, Terrence Rattigan, Kwame Kwei-Armah, Sarah Kane, and Alice Birch. We will also look at how class, money, immigration, and the end of the Empire changed British plays over time. And we will consider modern theater architecture and production design as well as the directing instincts of, for instance, Peter Brook, Katie Mitchell, Marianne Elliott, and Nicholas Hytner.

0101	Michael Olmert	Seats (Total: 26)
	MW 2:00pm - 3:15pm	TWS 0221

ENGL455**The Eighteenth-Century English Novel**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

The origins and development of the British novel, from the late seventeenth century until the beginning of the nineteenth. Questions about what novels were, who wrote them, and who read them. Authors such as Behn, Defoe, Richardson, Fielding, Sterne, Smollett, Burney, Radcliffe, and Austen.

0101	Laura Rosenthal	Seats (Total: 17)
	MW 3:30pm - 4:45pm	TWS 0236

ENGL457 The Modern Novel

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Modernism in the novel of the twentieth century. Such writers as Joyce, Lawrence, Murdoch, James, Forster, Faulkner, Hemingway, Fitzgerald, Ellison, Welty, Nabokov and Malamud.

Contact department for information to register for this course.

ENGL458A Literature by Women after 1800; Gender, Race and Empire in Women's Writing 1780-1900

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Selected writings by women after 1800.

Contact department for information to register for this course.

ENGL465 Theories of Sexuality and Literature

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Two lower-level English courses, at least one in literature; or permission of ARHU-English department. Cross-listed with LGBT465. Credit only granted for: ENGL465 or LGBT465.

An in-depth study of the ways in which sexuality and sexual difference create or confound the conditions of meaning in the production of literary texts. Attention to psychoanalysis, history of sexuality, feminist theory, and other accounts of sexual identity.

Contact department for information to register for this course.

ENGL466 Arthurian Legend

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Development of Arthurian legend in English and continental literature from Middle Ages to twentieth century. All readings in modern English.

0101	Thomas Moser	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	TWS 0205

ENGL468A Selected Topics in Film Studies; The Scene of Writing

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Advanced studies in various periods and genres of film.

Contact department for information to register for this course.

ENGL469C The Craft of Literature: Creative Form and Theory; Open Form

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Examines various forms of poetry and/or fiction, emphasizing the practice of making literary art and the aesthetic and theoretical approaches that define it. Students will practice the elements of literary craft, producing and experimenting with a wide range of forms and conventions in poetry and/or fiction. They will also produce critical work that articulates and contextualizes theoretical approaches to the making of literary art.

Prerequisite: 2 ENGL courses in literature or creative writing; and have completed a 200-level creative writing workshop in ENGL. Or permission of ARHU-English department. Repeatable to 9 credits if content differs.

0101	Michael Collier	Seats (Total: 20)
	MW 2:00pm - 3:15pm	TWS 3250

ENGL470 African-American Literature: The Beginning to 1910

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Examines African-American literature from its beginnings to the early twentieth century, including genres ranging from slave narratives, pamphlets, essays, and oratory, to poetry and fiction. Our emphasis is on the interaction between literature and literary forms, on the one hand, and historical and political developments in the push toward emancipation, on the other.

Prerequisite: Two English courses in literature; or permission of ARHU-English department. Cross-listed with AASP478B. Credit granted for ENGL470 or AASP478B.

0101	Chad Infante	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	TWS 0214

ENGL472 African-American Literature: 1945 to Present

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

Transformation of African-American literatures into modern and postmodern forms. Influenced by World War II and the Civil Rights and Black Power movements, this literature is characterized by conscious attempts to reconnect literary and folk forms, the emergence of women writers, and highly experimental fiction.

Cross-listed with ENGL472. Credit granted for ENGL472 or AASP478K.

Contact department for information to register for this course.

ENGL475 Postmodern Literature

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department.

The origins and ongoing development of postmodern literature. Aspects of the "postmodern condition," such as the collapse of identity, the erasure of cultural and aesthetic boundaries, and the dissolution of life into textuality. The novel and other genres and media.

Contact department for information to register for this course.

ENGL479B Selected Topics in English and American Literature after 1800; Black Performance: From Slavery to Hip Hop

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department. Repeatable to 9 credits if content differs.

0101	Julius Fleming	Seats (Total: 17)
	MW 3:30pm - 4:45pm	TWS 0201

ENGL479F Selected Topics in English and American Literature after 1800; Walking and Writing: The Plays, Screenplays and Teleplays of Aaron Sorkin

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department. Repeatable to 9 credits if content differs.

0101	Michael Olmert	Seats (Total: 23)
	M 3:30pm - 6:00pm	TWS 0214

ENGL479P Selected Topics in English and American Literature after 1800; BookLab: How to do things with Books

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: permission of department. Contact Matthew Kirschenbaum, mgk@umd.edu.

0101	Matthew Kirschenbaum	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	TWS 3252

ENGL479T Selected Topics in English and American Literature after 1800; Gothic and Romantic Literature

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Two English courses in literature; or permission of ARHU-English department. Repeatable to 9 credits if content differs.

0101	Orrin Wang	Seats (Total: 23)
	MW 5:00pm - 6:15pm	TWS 0221

ENGL482 History of the English Language

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENGL280, LING200, or HESP120; or permission of ARHU-English department.

Examines the origins and development of the English language.

0101	Linda Coleman	Seats (Total: 20)
	MW 2:00pm - 3:15pm	TWS 0236

ENGL487 Principles and Practices of Rhetoric

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: ENGL487 or COMM401.

A seminar examining foundational concepts and approaches in the theory and practice of rhetoric in civic, professional, academic, and interpersonal settings; focusing on key issues in persuasion, argumentation, and eloquence in historical and contemporary contexts.

0101	Vessela Valiavitcharska	Seats (Total: 20)
	MW 2:00pm - 3:15pm	TWS 0234

ENGL492 Graphic Design and Rhetoric

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: Students must have satisfied Fundamental Studies Academic Writing requirement. Credit only granted for: ENGL488A or ENGL492. Formerly: ENGL488A.

An exploration of the visual dimensions of texts and the skills involved in designing them well. Considers graphic design theory and history from a rhetorical perspective, working to understand and practice the use of symbol systems to express, inform, and advocate. Includes direct experimentation with the principles and techniques of graphic design.

Students are encouraged to bring laptops to class meetings.

0101	Melanie Kill	Seats (Total: 20)
	TuTh 9:30am - 10:45am	TWS 3252

ENGL493 Writing in Context

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Recommended: Satisfactory completion of professional writing requirement. Restriction: Must have earned a minimum of 60 credits.

A rhetorical genre studies approach to understanding the work that texts do in the world. Examines issues of identity, power, and medium as they relate to writing in various contexts. Students analyze the texts, context(s), and social significance of a public, professional, digital, and/or advanced academic genre and produce writing that meets, modifies, and subverts expectations.

Students are encouraged to bring laptops to class meetings.

0201	Melanie Kill	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	TWS 3136

ENGL494 Editing and Document Design

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENGL393 or ENGL391; or students who have taken courses with comparable content may contact the department.

Principles of general editing for clarity, precision and correctness. Applications of the conventions of grammar, spelling, punctuation and usage, and organization for logic and accuracy. Working knowledge of the professional vocabulary of editing applied throughout the course.

Must have completed Fundamental Studies Professional Writing requirement.

0101	Nicole Cuffy	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	TWS 0207

ENGL495 Independent Study in Honors

(Perm req) Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENGL373 and ENGL370. Restriction: Must be in English Language and Literature program; and candidacy for honors in English.

Completion and presentation of the senior honors project.

Contact department for information to register for this course.

ENGL497 English at Work

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: ENGL301; and an ENGL course at the 300-level or higher. Restriction: Must have earned a minimum of 60 credits.

Examines how English majors put their academic knowledge and skills to work in professional workplaces after graduation. Students learn strategies to research careers, and they shadow a person in a career of interest for a day. Students learn to compose different professional genres to write and speak about and for professional development and advancement, including inquiry letters, technical descriptions, professional portfolios, and elevator pitches. Students will critically examine the learning they have done in their undergraduate coursework and compose a vision for bringing that learning to life in their future work.

0101	Blake Wilder	Seats (Total: 20)
	MW 2:00pm - 3:15pm	TWS 0201

ENGL498**Advanced Fiction Workshop**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail

An advanced class in the making of fiction. Intensive discussion of students' own fiction. Readings include both fiction and essays about fiction by practicing writers. Writing short critical papers, responding to works of fiction, and to colleagues' fiction, in-class writing exercises, intensive reading, and thinking about literature, in equal parts, and attendance at readings.

Prerequisite: ENGL352 or ENGL396; or permission of department.

0101	Maud Casey W 3:30pm - 6:00pm	Seats (Total: 15) TWS 3132
0201	Emily Mitchell Th 3:30pm - 6:00pm	Seats (Total: 15) TWS 3252
0301	Rion Scott Tu 3:30pm - 6:00pm	Seats (Total: 15) TWS 3250

ENGL499**Advanced Poetry Workshop**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail

An advanced class in the making of poetry. Intensive discussion of students' own poems. Readings include both poetry and essays about poetry by practicing poets. Writing short critical prose pieces, responding critically to colleagues' poems, in-class and outside writing exercises, and attendance at poetry readings.

Prerequisite: ENGL353; or permission of ARHU-English department. Repeatable to 9 credits if content differs. Formerly: ENGL497.

0101	Elizabeth Arnold Th 3:30pm - 6:00pm	Seats (Total: 15) TWS 3250
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ENGL601**Literary Research and Critical Contexts**

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

0101	GerShun Avilez Tu 3:30pm - 6:00pm	Seats (Total: 14) TWS 3252
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ENGL602**Critical Theory and Literary Criticism**

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

An introduction to critical theory and literary criticism, with an overview of major movements (including formalism, structuralism and poststructuralism, Marxism, psychoanalysis, and feminism). Designed to help graduate students assess the various ways of approaching and writing about literature.

0101	Martha Nell Smith	Seats (Total: 14)
	Tu 6:30pm - 9:00pm	TWS 3134

ENGL611**Approaches to College Composition**

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of ARHU-English department. Additional information: Required for graduate assistants (optional to other graduate students).

A seminar emphasizing rhetorical and linguistic foundations for the handling of a course in freshman composition.

0101	Jessica Enoch	Seats (Total: 14)
	Th 12:00pm - 2:30pm	TWS 3250

ENGL625**Readings in English Victorian Literature**

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

0101	Jason Rudy	Seats (Total: 14)
	W 6:30pm - 9:00pm	TWS 3134

ENGL630**Readings in 20th Century English Literature**

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

0101	Christina Walter	Seats (Total: 14)
	Th 3:30pm - 6:00pm	TWS 3134

ENGL679**Professional and Career Mentoring for Master's Students**

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Augments advising currently provided by the English Department Graduate Studies Office. Individual professional and career mentoring for MA and MFA students from a faculty member.

Contact department for information to register for this course.

ENGL688 Poetry Workshop

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Poetry workshop.

0201	Michael Collier	Seats (Total: 12)
	W 3:30pm - 6:00pm	TWS 3252

ENGL689 Fiction Workshop

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Fiction workshop.

0101	Emily Mitchell	Seats (Total: 12)
	W 3:30pm - 6:00pm	TWS 3250

ENGL699 Independent Study

(Perm req)

Credits: 1-3

Grading Method: Regular,
Audit

Contact department for information to register for this course.

ENGL719C Seminar in Renaissance Literature; Shakespeare and Social Justice

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

0101	Amanda Bailey	Seats (Total: 11)
	Th 3:30pm - 6:00pm	TWS 3136

ENGL729A Seminar in Eighteenth-Century Literature; The Postmodern Enlightenment

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

0101	Tita Chico	Seats (Total: 11)
	Tu 3:30pm - 6:00pm	TWS 3134

ENGL748D Seminar in American Literature; Reparative Reading in Multiethnic U.S. Literature and Criticism
(Perm req) Credits: 3 Grading Method: Regular,
Audit

0101	Peter Mallios	Seats (Total: 11)
	M 3:30pm - 6:00pm	TWS 3134

ENGL749C Studies in Twentieth-Century Literature; Form and the Global Novel: 1980-Present
(Perm req) Credits: 3 Grading Method: Regular,
Audit

0101	Sangeeta Ray	Seats (Total: 11)
	Th 5:00pm - 7:30pm	ASY 3217

ENGL749E Studies in Twentieth-Century Literature; News that Stays News: Ezra Pound's Influence on Modern and Contemporary Poetry
(Perm req) Credits: 3 Grading Method: Regular,
Audit

0101	Elizabeth Arnold	Seats (Total: 11)
	Tu 6:30pm - 9:00pm	TWS 3136

ENGL768B Studies in Genre; Squaring the Circle: Readings in the Prose Poem, 1869-2019
(Perm req) Credits: 3 Grading Method: Regular,
Audit

0101	Joshua Weiner	Seats (Total: 11)
	M 6:30pm - 9:00pm	TWS 3134

ENGL776 Seminar in Modern Rhetorical Theory
(Perm req) Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of ARHU-English department. Additional information: May fulfill seminar requirements for MA in English with Concentration in Rhetoric and Composition.

Seminar in Modern Rhetorical Theory. Theories and trends in twentieth and twenty-first century rhetorical theory

0101	Scott Wible	Seats (Total: 11)
	M 3:30pm - 6:00pm	TWS 3132

ENGL798B Critical Theory Colloquium

(Perm req)

Credits: 1 Grading Method: Regular,
Audit

An intensive advanced exploration of current problems and issues in critical theory.

0101	Christina Walter	Seats (Total: 10)
	Contact instructor or department for details.	

ENGL798D Critical Theory Colloquium; Digital Studies

(Perm req)

Credits: 1 Grading Method: Regular,
Audit

An intensive advanced exploration of current problems and issues in critical theory.

Class meets in TWS 3136 on the following dates: 9/8, 10/6, 11/3, 12/8.

0101	Matthew Kirschenbaum	Seats (Total: 20)
	F 3:00pm - 5:00pm	Location: TBA

ENGL799 Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ENGL878 Pedagogical Mentoring for Doctoral Students

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Pedagogical mentoring by roster faculty members for graduate students teaching 200-level literature courses.

Contact department for information to register for this course.

ENGL879 Professional Mentoring for Doctoral Students

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Augments advising currently provided by the English Department Graduate Studies Office. Individual professional and career mentoring for PhD students from a faculty member.

Contact department for information to register for this course.

ENGL898 Pre-Candidacy Research

(Perm req)

Credits: 1-8 Grading Method: Regular

Pedagogical mentoring by roster faculty members for graduate students teaching 200-level literature courses.

Contact department for information to register for this course.

ENGL899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

ENMA Engineering, Materials**Fall 2019**

ENMA150 Materials of Civilization

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSNS, SCIS

The discovery of new materials has shaped history and built civilizations. The utilization, properties and production techniques of materials from the Bronze Age up through modern times and into the future will be traced. These materials are explained by considering their atomic structure, the binding forces between atoms and their arrangement, and how controlling the structure controls the materials properties.

0101	Robert Briber	Seats (Total: 40)	
	TuTh 3:30pm - 4:45pm	CHE 2108	
	W 2:00pm - 2:50pm	CHE 2136	Discussion
0102	Robert Briber	Seats (Total: 40)	
	TuTh 3:30pm - 4:45pm	CHE 2108	
	Th 11:00am - 11:50am	CSI 3120	Discussion

ENMA180 Materials Science and Engineering: The Field and the Future

Credits: 1 Grading Method: Regular

Restriction: Must be in a major in ENGR-A. James Clark School of Engineering.

Overview of the profession and the components of the Materials Science and Engineering program. Students will become familiar with the departmental faculty, areas of specialization within MSE, professional society student chapter, research opportunities and other resources available to students.

0101	N Parker	Seats (Total: 30)
	Tu 3:00pm - 4:15pm	JMP 2202

ENMA300 Introduction to Materials Engineering

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

*Prerequisite: ENES100; and permission of ENGR-Materials Science & Engineering department.
Corequisite: MATH241. Recommended: PHYS261 and PHYS260. Restriction: Permission of ENGR-Mechanical Engineering department. Cross-listed with ENME382. Credit only granted for: ENMA300 or ENME382.*

Structure of materials, chemical composition, phase transformations, corrosion and mechanical properties of metals, ceramics, polymers and related materials. Materials selection in engineering applications.

0101	Liyang Dai-Hatrick	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	CHE 2110
0201	Liyang Dai-Hatrick	Seats (Total: 89)
	TuTh 9:30am - 10:45am	KEB 1110
	<i>For students majoring in Materials Science and Engineering.</i>	
0301	Patrick McCluskey	Seats (Total: 30)
	MWF 10:00am - 10:50am	CHE 2110

ENMA312 Experimental Methods in Materials Science

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENMA300. Corequisite: ENMA460. Restriction: Junior standing or higher.

Introduction to experimental methods in materials characterization; synthesis of colloidal nanoparticles; X-ray diffraction and light scattering; optical microscopy; thermal conductivity and expansion; electrical measurements; heat capacity; computational materials design.

0101	Audaldo Ponce	Seats (Total: 10)
	Tu 2:00pm - 3:15pm	KEB 1135
	M 9:00am - 11:50am	KEB 1135 Lab

0102	Audaldo Ponce	Seats (Total: 10)	
	Tu 2:00pm - 3:15pm	KEB 1135	
	W 9:00am - 11:50am	KEB 1135	Lab

ENMA362

Mechanical Properties

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENMA300. Restriction: Junior standing or higher; and permission of ENGR-Materials Science & Engineering department.

Overview of Mechanical Behavior, Elastic Behavior, Dislocations, Plastic Deformation, Strengthening of Crystalline Materials, Composite Materials, High Temperature Deformation of Crystalline Materials, Permanent Deformation of Noncrystalline Materials, Tensile Fracture at Low Temperatures, Engineering Aspects of Fracture, High Temperature Fracture, Fatigue, and Experimental determination of Mechanical Properties including Hardness of Metals and Strength of Metals, Polymers, Ceramics and Composites.

For ENMA majors only.

0101	Sreeramamurthy Ankem	Seats (Total: 22)	
	MWF 12:00pm - 12:50pm	CSI 2117	
	Tu 9:00am - 11:00am	KEB 1135	Lab
0102	Sreeramamurthy Ankem	Seats (Total: 22)	
	MWF 12:00pm - 12:50pm	CSI 2117	
	Th 9:00am - 11:00am	KEB 1135	Lab

ENMA422

Radiation Effects of Materials

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENMA300; and permission of ENGR-Materials Science & Engineering department. Credit only granted for: ENMA422 or ENMA489E. Formerly: ENMA489E.

Ionizing radiation, radiation dosimetry and sensors, radiation processing, radiation effects on: polymers, metals, semiconductors, liquids, and gases. Radiation in advanced manufacturing, radiation-physical technology.

0101	Mohamad Al-Sheikhly	Seats (Total: 30)	
	TuTh 3:30pm - 4:45pm	CHM 1228	

ENMA441

Characterization of Materials

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENMA300. Restriction: Permission of ENGR-Materials Science & Engineering department; and senior standing. Credit only granted for: ENMA489T or ENMA441. Formerly: ENMA489T.

Techniques to characterize the properties of materials whose characteristic dimensions range from nanometers to macroscopic. These include conventional crystalline and noncrystalline materials, with a special attention to materials of current technological interest. The course will include recent results from the scientific literature.

0101	John Cumings	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	PHY 4221

ENMA443

Photonic Materials, Devices and Reliability

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of ENGR-Materials Science & Engineering department; and junior standing or higher. Credit only granted for: ENMA443 or ENMA489Z. Formerly: ENMA489Z.

The course focuses on the understanding of the basic optical processes in semiconductors, dielectrics and organic materials. The application of such materials in systems composed of waveguides, light emitting diodes and lasers, as well as modulators is developed.

0101	Aristos Christou	Seats (Total: 20)
	TuTh 5:00pm - 6:15pm	CHM 1228

ENMA460

Physics of Solid Materials

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS271, PHYS270, and MATH241. Restriction: Junior standing or higher; and must be in Engineering: Materials Science program. Cross-listed with PHYS431. Credit only granted for: ENMA460 or PHYS431.

Classes of materials; introduction to basic ideal and real materials' behavior including mechanical, electrical, thermal, magnetic and optical responses of materials; importance of microstructure in behavior. One application of each property will be discussed in detail.

0101	Gottlieb Oehrlein	Seats (Total: 50)
	MW 5:00pm - 6:15pm	CSI 1122

ENMA466**Advanced Materials Fabrication Laboratory**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENMA465; and permission of ENGR-Materials Science & Engineering department.

This course allows students an opportunity to study advanced materials systems in depth through a combination of lectures and hands-on laboratory experiments. Students will be trained in materials processing and characterization techniques. Each student will fabricate materials and devices in our state-of-the-art nanofabrication clean room facility (Fablab), as well as evaluate them using a variety of characterization techniques.

0101	Gary Rubloff	Seats (Total: 4)
	W 10:00am - 11:30am	EGR 3114
	Tu 12:30pm - 3:30pm	KEB 2300 Lab
0102	Gary Rubloff	Seats (Total: 4)
	W 10:00am - 11:30am	EGR 3114
	M 9:00am - 12:00pm	KEB 2300 Lab
0103	Gary Rubloff	Seats (Total: 4)
	W 10:00am - 11:30am	EGR 3114
	F 12:30pm - 3:30pm	KEB 2300 Lab

ENMA471**Kinetics, Diffusion and Phase Transformations**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in ENMA461. Restriction: Junior standing or higher; or permission of ENGR-Materials Science & Engineering department.

Fundamentals of diffusion, the kinetics of reactions including nucleation and growth and phase transformations in materials.

0101	Manfred Wuttig, Raymond Phaneuf	Seats (Total: 49)
	TuTh 11:00am - 12:15pm	CHE 2118

ENMA473**Engineering Using High Strength Metals and Alloys**

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENMA300, ENMA362, and ENMA461; and permission of ENGR-Materials Science & Engineering department.

This is a class focused on the materials engineering challenges of applying high strength metals and alloys to solutions. The extraordinary properties of these alloys derive from (1) highly metastable microstructures, (2) high strengths and melting points of the base metals, (3) complicated processing and fabrication procedures, and (4) their resulting complex behavior in extreme environments. This course will give you the knowledge base you need to select, apply and troubleshoot the performance of high strength metals and alloys in a variety of applications.

0101	Timothy Foecke	Seats (Total: 26)
	TuTh 5:00pm - 6:15pm	JMP 1109

ENMA486 Seminar in Materials Science and Engineering

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in Engineering: Materials Science program.

Current research in materials science and engineering and related fields. The lectures are presented by scientists and engineers from academia, national laboratory, US government, etc., in the format of seminars.

0101	John Cumings, Gary Rubloff	Seats (Total: 4)
	F 1:00pm - 2:30pm	CHE 2108

ENMA487 Capstone Preparation

(Perm req)

Credits: 1 Grading Method: Regular

Restriction: Must be in Engineering: Materials Science program; and senior standing; and permission of ENGR-Materials Science & Engineering department.

In preparation for the senior level design course, students will do background research and develop white papers from which teams will form around short listed design projects. The projects should focus on a society, industry, military or technological based problem in Materials Science and Engineering leading to a design and strategy to address the problem in the following course, ENMA 490. The course will include written and oral presentations of the white papers and team proposals.

0101	Raymond Phaneuf	Seats (Total: 40)
	W 1:00pm - 1:50pm	EGR 0135

ENMA489C Selected Topics in Engineering Materials; Continuum Modeling of Materials

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Selected topics of current importance in materials science and engineering.

Prerequisite: ENMA300, MATH206, ENMA362, PHYS270/271, or equivalent. Recommended: Knowledge in Thermodynamics (ENMA461) and Physical Chemistry (CHEM481; or equivalent. Restriction: Permission of ENGR-Materials Science & Engineering department. Credit granted for ENMA489C or ENME689C.

0101	Yifei Mo	Seats (Total: 22)
	TuTh 8:00am - 9:15am	ATL 1410

ENMA489D Selected Topics in Engineering Materials; Archaeometry

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Selected topics of current importance in materials science and engineering.

0101	Kimberly Foecke	Seats (Total: 25)
	TuTh 9:30am - 10:45am	CHE 2145

ENMA495 Polymeric Engineering Materials I

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENMA300. Restriction: Permission of ENGR-Materials Science & Engineering department.

Study of polymeric engineering materials and the relationship to structural type. Elasticity, viscoelasticity, anelasticity and plasticity of single and multiphase materials. Emphasis is on polymeric materials.

0101	Luz Martinez-Miranda	Seats (Total: 25)
	MW 3:30pm - 4:45pm	EGR 1102

ENMA499 Senior Laboratory Project

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Students work with a faculty member on an individual laboratory project in one or more of the areas of engineering materials. Students will design and carry out experiments, interpret data and prepare a comprehensive laboratory report.

0101	Isabel Lloyd	Seats (Total: 6)
	Contact instructor or department for details.	

ENMA641 Nanotechnology Characterization

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of ENGR-Materials Science & Engineering department. Credit only granted for: ENMA698T or ENMA641. Formerly: ENMA698T.

Techniques to characterize the properties of materials whose characteristic dimensions are a few to a few hundred nanometers, including conventional nanocrystalline materials, but concentrating on novel nanomaterials: carbon nanotubes, quantum dots, quantum wires, and quantum wells are covered. The emphasis is on recent results from the scientific literature concerning those properties that make nanostructures interesting: quantum effects, novel transport phenomena, enhanced mechanical properties associated with localization and with small crystallite size.

0101	John Cumings	Seats (Total: 3)
	TuTh 12:30pm - 1:45pm	PHY 4221

ENMA643 Advanced Photonic Materials

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of ENGR-Materials Science & Engineering department. Credit only granted for: ENMA698Z, ENRE648Z, or ENMA643. Formerly: ENMA698Z.

The understanding of the basic optical processes in photonic devices and systems composed of waveguides, light emitting diodes and lasers, as well as modulators is developed. Lectures on basic degradation mechanisms of such systems will be presented. The area of organic based LED reliability will be covered from the point of view of the stability of the organic-inorganic interface.

0101	Aristos Christou	Seats (Total: 5)
	TuTh 5:00pm - 6:15pm	CHM 1228

ENMA650 Nanometer Structure of Materials

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: ENMA460; or students who have taken courses with comparable content may contact the department. And permission of ENGR-Materials Science & Engineering department.

The basic concepts required for understanding nanostructured materials and their behavior will be covered. Topics covered include the structural aspects of crystalline and amorphous solids and relationships to bonding types, point and space groups. Summary of diffraction theory and practice. The reciprocal lattice. Relationships of the microscopically measured properties to crystal symmetry. Structural aspects of defects in crystalline solids.

0101	Daniel Josell	Seats (Total: 26)
	MW 5:00pm - 6:15pm	CHE 2145

ENMA660 Thermodynamics in Materials Science

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Corequisite: ENMA650. Restriction: Permission of ENGR-Materials Science & Engineering department.

Thermodynamics of engineering solids. Thermal, diffusional and mechanical interactions in macroscopic systems. Systems in thermal contact, systems in thermal and diffusive contact, systems in thermal and mechanical contact.

0101	Oded Rabin	Seats (Total: 25)
	MW 3:30pm - 4:45pm	HBK 1108

ENMA680 Determination of Structure, Chemical Composition and Defects in Materials

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENMA650. Restriction: Permission of ENGR-Materials Science & Engineering department.

Basic principles of electron microscopy theory, electron diffraction, and imaging theory. The electron beam sample interaction that gives rise to different signals is related to the structural and compositional information that is obtained from a sample using a TEM. The most common TEM techniques for structural characterization of a sample, namely, electron diffraction, bright/dark field imaging, and high resolution lattice imaging are discussed. Compositional information obtained from x-ray fluorescence and electron energy loss as well as the resolution of these techniques is also covered. A description of techniques used to study magnetic materials is also presented.

0101	Lourdes Salamanca-Riba	Seats (Total: 21)
	TuTh 3:30pm - 4:45pm	CHE 2145

ENMA683 Structural Determination Laboratory

(Perm req)

Credits: 1 Grading Method: Regular,
Audit

Restriction: Permission of ENGR-Materials Science & Engineering department. Credit only granted for: ENMA698L or ENMA683. Formerly: ENMA698L.

The operation of an electron microscope is covered. TEM techniques that are used to characterize the structure, defects and composition of a sample are presented and used to study a variety of materials. These techniques are: electron diffraction patterns, bright/dark field imaging, high resolution lattice imaging and energy dispersive x-ray spectroscopy. Also covers different sample preparation techniques for TEM. The goal is that the students become independent users of the TEM.

0101	Lourdes Salamanca-Riba	Seats (Total: 5)	
	Th 9:30am - 12:30pm	KEB 1237	Lab
0201	Lourdes Salamanca-Riba	Seats (Total: 5)	
	F 2:30pm - 5:30pm	KEB 1237	Lab

ENMA688 Seminar in Materials Science and Engineering

Credits: 1 Grading Method: Regular,
Audit

Current research in materials science and engineering and related fields.

0101	Gary Rubloff, John Cumings	Seats (Total: 24)	
	F 1:00pm - 2:30pm	CHE 2108	

ENMA689C Special Topics in Engineering Materials; Continuum Modeling of Materials

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of ENGR-Materials Science & Engineering department. Credit granted for ENMA489C or ENME689C.

0101	Yifei Mo	Seats (Total: 7)	
	TuTh 8:00am - 9:15am	ATL 1410	

ENMA698 Special Problems in Materials Science and Engineering

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

Individual, supervised study in materials science and engineering.

Contact department for information to register for this course.

ENMA797 Independent Study

Credits: 3 Grading Method: Regular,
Audit

This course is designed to provide students with a directed independent study course in order to prepare the scholarly paper required for the master's degree without thesis degree option.

0101	Ichiro Takeuchi	Seats (Total: 5)
	Contact instructor or department for details.	

ENMA799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular
Contact department for information to register for this course.

ENMA898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular
Contact department for information to register for this course.

ENMA899 Doctoral Dissertation Research

(Perm req) Credits: 6 Grading Method: Regular
Contact department for information to register for this course.

ENME Engineering, Mechanical **Fall 2019**

ENME201 Careers in Mechanical Engineering

Credits: 1 Grading Method: Sat-Fail

The Mechanical Engineering Curriculum, Career Paths. Research areas in the Mechanical Engineering Department. The Mechanical Engineering Profession.

0101	Gary Pertmer	Seats (Total: 65)
	Th 12:30pm - 1:30pm	EGR 1202

ENME202 Computing Fundamentals for Engineers

(Perm req) Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Corequisite: Must be concurrently enrolled in MATH141. Restriction: Permission of ENGR-Mechanical Engineering department. Credit only granted for: ENAE202 or ENME202.

Introduction to computational tools for the solution of engineering problems. C++ & MATLAB programming including branching and loops, functions, file handling, arrays, and data structures. Students will be introduced to object-oriented programming, basic computing, algorithms, and principles of software engineering.

0101	Abhijit Dasgupta MW 11:00am - 11:50am F 8:00am - 9:50am	Seats (Total: 42) BRB 1101 KEB 2111	Lab
0102	Abhijit Dasgupta MW 11:00am - 11:50am Th 3:00pm - 4:50pm	Seats (Total: 42) BRB 1101 KEB 2111	Lab
0103	Abhijit Dasgupta MW 11:00am - 11:50am Th 3:00pm - 4:50pm	Seats (Total: 30) BRB 1101 EGR 0312	Lab
0106	Abhijit Dasgupta MW 11:00am - 11:50am W 3:00pm - 4:50pm	Seats (Total: 42) BRB 1101 KEB 2111	Lab
0107	Abhijit Dasgupta MW 11:00am - 11:50am Th 5:00pm - 6:50pm	Seats (Total: 30) BRB 1101 EGR 0312	Lab

ENME208

Introduction to Automotive Engineering and Design

(Perm req)

Credits: 2

Grading Method: Regular

Selected concepts in automotive engineering and design at the introductory level utilizing the Terps Racing Baja SAE student project as a learning instrument. This class compliments ENME408, Automotive Design, which focuses on the Terps Racing Formula SAE car.

0101	Scott Schmidt Tu 6:30pm - 7:30pm Th 6:30pm - 8:30pm	Seats (Total: 10) JMP 1215 JMP 1215	Discussion
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ENME272

Introduction to Computer Aided Design

(Perm req)

Credits: 2

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENES100; and must have completed or be concurrently enrolled in MATH141.

Restriction: Permission of ENGR-Mechanical Engineering department. Credit only granted for: ENME 414 or ENME272.

Fundamentals of CAD, using solid modeling packages (Pro/E, SolidWorks, and Autodesk Inventor). Two and three dimensional drawing. Dimensioning and specifications. Introduction of CAD based analysis tools. Students will complete a design project.

0101	Mohammad Fazelpour M 8:00am - 9:50am	Seats (Total: 42) KEB 2111
0201	Hesam Babahosseini W 8:00am - 9:50am	Seats (Total: 42) KEB 2111
0301	Mohammad Fazelpour F 1:00pm - 2:50pm	Seats (Total: 42) KEB 2111
0401	Ryan Smith Th 8:00am - 9:50am	Seats (Total: 42) KEB 2111
0501	Mohammad Fazelpour Tu 8:00am - 9:50am	Seats (Total: 42) KEB 2111

ENME331

Fluid Mechanics

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENES232 and ENES221. Credit only granted for: BIOE331 or ENME331.

Principles of fluid mechanics. Mass, momentum and energy conservation. Hydrostatics. Control volume analysis. Internal and external flow. Boundary layers. Modern measurement techniques. Computer analysis. Laboratory experiments.

0101	Amir Riaz, Siddhartha Das MW 12:00pm - 12:50pm Tu 1:00pm - 2:50pm	Seats (Total: 35) EGR 1202 KEB 1200	Lab
0102	Siddhartha Das, Amir Riaz MW 12:00pm - 12:50pm W 1:00pm - 2:50pm	Seats (Total: 35) EGR 1202 JMP 1109	Lab
0103	Siddhartha Das, Amir Riaz MW 12:00pm - 12:50pm Th 1:00pm - 2:50pm	Seats (Total: 35) EGR 1202 KEB 1200	Lab
0105	Siddhartha Das, Amir Riaz MW 12:00pm - 12:50pm Tu 3:00pm - 4:50pm	Seats (Total: 35) EGR 1202 CHE 2118	Lab

0106	Siddhartha Das, Amir Riaz	Seats (Total: 35)	
	MW 12:00pm - 12:50pm	EGR 1202	
	W 3:00pm - 4:50pm	JMP 1109	Lab

ENME332 Transfer Processes

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENME331.

The principles of heat transfer. Conduction in solids. Convection. Radiation. Modern measurement techniques. Computer analysis.

0101	Amir Riaz, Marino diMarzo	Seats (Total: 39)	
	MW 9:00am - 9:50am	EGR 1202	
	Tu 1:00pm - 2:50pm	JMP 2202	Lab
0102	Marino diMarzo, Amir Riaz	Seats (Total: 39)	
	MW 9:00am - 9:50am	EGR 1202	
	W 1:00pm - 2:50pm	JMP 2202	Lab
0103	Amir Riaz, Marino diMarzo	Seats (Total: 39)	
	MW 9:00am - 9:50am	EGR 1202	
	Th 1:00pm - 2:50pm	JMP 2202	Lab
0104	Marino diMarzo, Amir Riaz	Seats (Total: 39)	
	MW 9:00am - 9:50am	EGR 1202	
	F 1:00pm - 2:50pm	JMP 2202	Lab

ENME350 Electronics and Instrumentation I

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: PHYS271 and PHYS270.

Modern instrumentation. Basic circuit design, standard microelectronic circuits. Digital data acquisition and control. Signal conditioning. Instrumentation interfacing. Designing and testing of analog circuits. Laboratory experiments.

0101	Jungho Kim, Xinan Liu	Seats (Total: 48)	
	MW 8:00am - 8:50am	BRB 1101	
	M 1:00pm - 2:50pm	EGR 3108	Lab

0102	Jungho Kim, Xinan Liu MW 8:00am - 8:50am Th 1:00pm - 2:50pm	Seats (Total: 48) BRB 1101 EGR 3108	Lab
0103	Jungho Kim, Xinan Liu MW 8:00am - 8:50am W 3:20pm - 5:10pm	Seats (Total: 48) BRB 1101 EGR 3108	Lab
0104	Jungho Kim, Xinan Liu MW 8:00am - 8:50am Tu 3:20pm - 5:10pm	Seats (Total: 48) BRB 1101 EGR 3108	Lab
0105	Jungho Kim, Xinan Liu MW 8:00am - 8:50am M 3:20pm - 5:10pm	Seats (Total: 48) BRB 1101 EGR 3108	Lab

ENME351

(Perm req)

Electronics and Instrumentation II

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS271, ENME350, and PHYS270.

Continuation of ENME 350. Modern instrumentation. Basic circuit design, standard microelectronic circuits. Digital data acquisition and control. Signal conditioning. Instrumentation interfacing. Designing and testing of analog circuits. Laboratory experiments.

0101	Steven Mitchell MW 10:00am - 10:50am Tu 1:00pm - 2:50pm	Seats (Total: 40) EGR 1202 EGR 3108	Lab
0102	Steven Mitchell MW 10:00am - 10:50am W 6:00pm - 7:50pm	Seats (Total: 40) EGR 1202 EGR 3108	Lab
0103	Steven Mitchell MW 10:00am - 10:50am W 1:00pm - 2:50pm	Seats (Total: 40) EGR 1202 EGR 3108	Lab
0104	Steven Mitchell MW 10:00am - 10:50am Tu 6:00pm - 7:50pm	Seats (Total: 40) EGR 1202 EGR 3108	Lab

ENME361**Vibration, Controls and Optimization I**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENES220, ENES221, and MATH246; and (MATH206 or ENME202). Restriction: Must be in Engineering: Mechanical program.

Fundamentals of vibration, controls and optimization. Analysis and design in time, Laplace and frequency domains. Mathematical description of system response, system stability, control and optimization. Optimal design of mechanical systems.

0101	Joshua Radice	Seats (Total: 150)
	TuTh 9:30am - 10:45am	EGR 1202

ENME371**Product Engineering and Manufacturing**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENES221; and (ENME392 or STAT400). Restriction: Must be in Engineering: Mechanical program.

Business aspects of engineering product development. Relationship of design and manufacturing. Product specification. Statistical process control. Design team development. The development process.

0101	Vincent Nguyen	Seats (Total: 35)
	MW 11:00am - 11:50am	EGR 1202
	Th 5:00pm - 6:50pm	EGL 0101 Lab
0102	Vincent Nguyen	Seats (Total: 35)
	MW 11:00am - 11:50am	EGR 1202
	Th 3:00pm - 4:50pm	EGL 0101 Lab
0103	Vincent Nguyen	Seats (Total: 35)
	MW 11:00am - 11:50am	EGR 1202
	F 8:00am - 9:50am	EGL 0101 Lab
0104	Vincent Nguyen	Seats (Total: 35)
	MW 11:00am - 11:50am	EGR 1202
	Th 7:00pm - 8:50pm	EGL 0101 Lab
0105	Vincent Nguyen	Seats (Total: 35)
	MW 11:00am - 11:50am	EGR 1202
	W 6:00pm - 7:50pm	EGL 0101 Lab

ENME382 Introduction to Materials Engineering

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENES100; and permission of ENGR-Mechanical Engineering department. Corequisite: MATH241. Recommended: PHYS261 and PHYS260. Restriction: Permission of ENGR-Mechanical Engineering department. Cross-listed with ENMA300. Credit only granted for: ENMA300 or ENME382.

Structure of materials, chemical composition, phase transformations, corrosion and mechanical properties of metals, ceramics, polymers and related materials. Materials selection in engineering applications.

0101	Liyang Dai-Hattrick	Seats (Total: 90)
	TuTh 11:00am - 12:15pm	CHE 2110
0301	Patrick McCluskey	Seats (Total: 90)
	MWF 10:00am - 10:50am	CHE 2110

ENME392 Statistical Methods for Product and Processes Development

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH241.

Integrated statistical methodology for the improvement of products and processes in terms of performance, quality and cost. Designed experimentation. Statistical process control. Software application. Laboratory activities.

Delivered via ITV.

0101	Johan Larsson	Seats (Total: 103)
	TuTh 11:00am - 12:15pm	JMP 3201
0201	Johan Larsson	Seats (Total: 120)
	TuTh 9:30am - 10:45am	JMP 3201

ENME400 Machine Design

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in ENME361. Restriction: Permission of ENGR-Mechanical Engineering department.

Design of mechanical elements and planar machines. Failure theories. Design of pressure vessels, joints, rotating elements, and transmission elements. Kinematic structures, graphical, analytical, and numerical analysis and synthesis of linkages, gear trains, and flywheels are covered.

0101	Chandrasekhar Thamire	Seats (Total: 70)	
	MW 9:00am - 9:50am	ESJ 2208	
	F 10:00am - 11:50am	SYM 0200	Discussion
0201	Chandrasekhar Thamire	Seats (Total: 70)	
	TuTh 10:00am - 10:50am	SYM 0200	
	Th 2:00pm - 3:50pm	MCB 1207	Lab

ENME408

Selected Topics in Engineering Design; Automotive Design

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Creativity and innovation in design. Generalized performance analysis, reliability and optimization as applied to the design of components and engineering systems. Use of computers in design of multivariable systems.

Restriction: Must be in Engineering: Mechanical program; and senior standing. Or permission of ENGR-Mechanical Engineering department. Repeatable to 6 credits if content differs. Creativity and innovation in design. Generalized performance analysis, reliability and optimization as applied to the design of components an engineering systems. Use of computers in design of multivariable systems.

0101	Leonard Hamilton	Seats (Total: 55)	
	MW 5:00pm - 6:15pm	JMP 3201	

ENME416

Additive Manufacturing

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENME331. And ENME272; or ENME414. Restriction: Permission of ENGR-Mechanical Engineering department.

Develop a comprehensive understanding of fundamental additive manufacturing, 3D printing approaches, including: extrusion-based deposition, stereolithography, powder bed-based melting, and inkjet-based deposition. Cultivate a design for-additive manufacturing skillset for CAD and CAM methodologies to produce successful 3D prints. Fabricate 3D mechanical objects using a variety of 3D printing technologies on campus. Execute a design project that demonstrates how additive manufacturing technologies can overcome critical limitations of traditional manufacturing processes.

0101	Ryan Sochol	Seats (Total: 50)	
	MWF 12:00pm - 12:50pm	JMP 2121	

ENME423**Modern Climate Control and Building Energy Design/Analysis**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENES232. Corequisite: ENME332. Restriction: Permission of ENGR-Mechanical Engineering department.

Fundamentals and design calculations of heat and moisture transfer in buildings; evaluation of cooling, heating and power requirements of buildings; building energy consumption simulations, use of alternative energy and energy conservation measures in buildings; fundamentals of fans/pumps and air/water distribution in buildings; introduction to refrigeration and energy systems for data centers and other mission-critical facilities.

Delivered via ITV.

0101	Jelena Srebric	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	EGR 0135

ENME426**Production Management**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: BMGT385 or ENME426.

The basic concepts and models needed to understand and design manufacturing systems, including the history of manufacturing, performance measures, queuing systems, variability, production planning and scheduling, lean manufacturing, and pull production control.

0101	Jeffrey Herrmann	Seats (Total: 53)
	MW 2:00pm - 3:15pm	SQH 1117

ENME430**Fundamentals of Nuclear Reactor Engineering**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH246. Restriction: Permission of ENGR-Mechanical Engineering department.

Fundamental aspects of nuclear physics and nuclear engineering, including nuclear interactions; various types of radiation and their effects on materials and humans; and basic reactor physics topics, including simplified theory of reactor critically.

0101	Robert Sanders	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	JMP 2121

ENME432 Reactor and Radiation Measurements Laboratory

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENME430 and MATH246. Restriction: Permission of ENGR-Mechanical Engineering department.

Basics concepts of nuclear radiation and radiation detectors including types of radiation, radioactive decay, and interactions of radiation with matter.

0101	Amber Johnson	Seats (Total: 10)
	Th 9:30am - 10:20am	Location: TBA
	Th 4:00pm - 7:00pm	Location: TBA Lab

ENME440 Applied Machine Learning for Engineering and Design

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENME392; or permission of instructor. Restriction: Permission of ENGR-Mechanical Engineering department. Credit only granted for: ENME440, ENME808E, or ENME743.

Learn how to apply techniques from Artificial Intelligence and Machine Learning to solve engineering problems and design new products or systems. Design and build a personal or research project that demonstrates how computational learning algorithms can solve difficult tasks in areas you are interested in. Master how to interpret and transfer state-of-the-art techniques from computer science to practical engineering situations and make smart implementation decisions.

0101	Mark Fuge	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	CHE 2136

ENME442 Information Security

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must have Senior standing in engineering; and permission of ENGR-Mechanical Engineering department. Jointly offered with ENRE684 . Credit only granted for: ENRE648J, ENME442, ENRE684, or ENPM808E.

The materials presented are divided into three major components: overview, detailed concepts and implementation techniques. The topics to be covered are: general security concerns and concepts from both a technical and management point of view, principles of security, architectures, access control and multi-level security, trojan horses, covert channels, trap doors, hardware security mechanism, security models, security kernels, formal specifications and verification, networks and distribution systems and risk analysis.

0101	Michel Cukier	Seats (Total: 24)
	TuTh 9:30am - 10:45am	JMP 2222

ENME454 Vehicle Dynamics

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Corequisite: ENME361. Restriction: Permission of ENGR-Mechanical Engineering department.

The fundamentals of passenger vehicle and light truck design and vehicle dynamics are covered. The engineering principles associated with acceleration, braking, handling, ride quality, aerodynamics, and tire mechanics are discussed, as well as suspension and steering design.

0101	Vincent Nguyen	Seats (Total: 66)
	MW 3:30pm - 4:45pm	JMP 3201

ENME462 Vibrations, Controls, and Optimization II

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENME351 and ENME361.

Continuation of ENME 361. Fundamentals of vibration, controls, and optimization. Analysis and design in time, Laplace and frequency domains. Mathematical descriptions of system response, system stability, control and optimization. Optimal design of mechanical systems.

Delivered via ITV.

0101	Munther Hassouneh	Seats (Total: 40)
	MW 10:00am - 10:50am	JMP 3201
	W 1:00pm - 2:50pm	KEB 2111 Discussion
0102	Munther Hassouneh	Seats (Total: 30)
	MW 10:00am - 10:50am	JMP 3201
	F 3:00pm - 4:50pm	KEB 2111 Discussion
0103	Munther Hassouneh	Seats (Total: 40)
	MW 10:00am - 10:50am	JMP 3201
	F 10:00am - 11:50am	KEB 2111 Discussion
0201	Nikhil Chopra	Seats (Total: 30)
	MW 10:00am - 10:50am	EGR 1108
	W 1:00pm - 2:50pm	KEB 2107 Discussion

0202	Nikhil Chopra	Seats (Total: 30)	
	MW 10:00am - 10:50am	EGR 1108	
	M 11:00am - 12:50pm	KEB 2107	Discussion

ENME467 Engineering for Social Change

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must not be in Engineering: Mechanical program; and junior standing or higher; and must be in a major in ENGR-A. James Clark School of Engineering. Cross-listed with ENES467. Credit only granted for: ENME467 or ENES467.

Critical analysis of issues at the intersection of engineering, philanthropy and social change. How engineering design, products and processes have created social change in the past and will do so in the future through both intended and unintended consequences. Topics covered include energy, sustainability and climate change, autonomy, the digital future, low cost engineering, manufacturing, philanthropy, ethics and the impact of electronics on society, among others. Faculty and external experts will engage with students on these topics. Students will broadly engage with organizations involved in using technology for positive social impact.

Cross-listed with ENES467. Credit granted for ENME467 or ENES467. Class will be held off campus at 7878b Diamondback Drive, which is behind The Hotel on Route 1.

0101	Sami Ainane, Davinder Anand	Seats (Total: 50)	
	F 11:00am - 1:40pm	Location: TBA	

ENME470 Finite Element Analysis

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Senior standing; and permission of ENGR-Mechanical Engineering department.

Basic concepts of the theory of the finite element method. Applications in solid mechanics and heat transfer.

0101	Peter Chung	Seats (Total: 24)	
	TuTh 5:00pm - 6:15pm	CHE 2118	
	M 12:00pm - 1:15pm	KEB 2111	Lab
0102	Peter Chung	Seats (Total: 24)	
	TuTh 5:00pm - 6:15pm	CHE 2118	
	W 12:00pm - 1:15pm	EGR 0312	Lab

ENME472**Integrated Product and Process Development**

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: CS

*Prerequisite: ENME371.**Integration of product development with the development process. Design strategies. Product architecture. Design for manufacturing. Selection of materials. Design for assembly.*

0101	Shapour Azarm	Seats (Total: 30)	
	Tu 12:00pm - 1:50pm	EGL 0101	
	TuTh 11:00am - 11:50am	EGR 1202	Discussion
0102	Linda Schmidt	Seats (Total: 30)	
	Th 12:00pm - 1:50pm	EGL 0101	
	TuTh 11:00am - 11:50am	EGR 1202	Discussion
0103	David Bigio	Seats (Total: 30)	
	W 4:00pm - 5:50pm	EGL 0101	
	TuTh 11:00am - 11:50am	EGR 1202	Discussion
0104	Monifa Vaughn-Cooke	Seats (Total: 30)	
	F 1:00pm - 2:50pm	EGL 0101	
	TuTh 11:00am - 11:50am	EGR 1202	Discussion
0106	Gary Pertmer	Seats (Total: 30)	
	Tu 2:00pm - 3:50pm	EGL 0101	
	TuTh 11:00am - 11:50am	EGR 1202	Discussion

ENME473**Mechanical Design of Electronic Systems**

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit*Design considerations in the packaging of electronic systems. Production of circuit boards and design of electronic assemblies. Vibration, shock, fatigue and thermal considerations.*

Delivered via ITV.

0101	Bongtae Han	Seats (Total: 25)	
	MW 2:00pm - 3:15pm	JMP 2121	

ENME486**Computational Modeling, Simulation, and Interactive Visualization**

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Senior standing; and permission of ENGR-Mechanical Engineering department.

Creation of interactive graphic displays from the numerical simulation of mechanical engineering models. Brief description of each model provided, along with varied parameters to explore models' characteristics. Conclusions drawn from use of each interactive graphic. Mathematica language introduced and interwoven with the numerical simulation of the models, which will include: robotics and mechanisms, static response of beams, control systems, measurement systems, fluid flow, vibrations, geometric modeling, finite element analysis, and nonlinear phenomena.

0101	Edward Magrab	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	EGR 0312

ENME488

Special Problems

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Advanced problems in mechanical engineering with special emphasis on mathematical and experimental methods.

Limited to mechanical engineering seniors.

Contact department for information to register for this course.

ENME489

Special Topics in Mechanical Engineering

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Contact department for information to register for this course.

ENME489B

Special Topics in Mechanical Engineering; Mechatronics and the Internet of Things

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Prerequisite: ENME351; and permission of department.

0101	Don DeVoe	Seats (Total: 30)
	MW 3:30pm - 4:45pm	AJC 2119

ENME489C

Special Topics in Mechanical Engineering; Medical Robotics

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Co-req ENME361 Permission of the Department.

0101	Axel Krieger	Seats (Total: 30)
	MW 2:00pm - 3:15pm	EGR 0135

ENME489F

Special Topics in Mechanical Engineering; Dynamics of Atmospheric Flight

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Prerequisite: ENME331.

0201	David Findlay	Seats (Total: 10)
	W 3:30pm - 6:10pm	JMP 2120

ENME489G

Special Topics in Mechanical Engineering; Manufacturing Processes and Design

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Prerequisites: ENME382; and permission of department.

0101	Ho Yeung	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	CSI 3120

ENME489V

Special Topics in Mechanical Engineering; Mechanical Contracting

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

0101	Gary Pertmer, Michael Mack	Seats (Total: 31)
	Th 8:00am - 10:40am	EGR 2154

ENME489X

Special Topics in Mechanical Engineering; Energy Conversion Systems for Sustainability

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Prerequisite: ENES232.

0101	Ashwani Gupta	Seats (Total: 65)
	Th 4:00pm - 6:40pm	JMP 3201

ENME489Z

Special Topics in Mechanical Engineering; Structural Mechanics - Aerospace Applications

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Selected topics of current importance in mechanical engineering.

Prerequisite: ENES220 and MATH246. Restriction: permission of department.

Contact department for information to register for this course.

ENME605

Advanced Systems Control

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: ENME462; or permission of instructor.

Modern control theory for both continuous and discrete systems. State space representation is reviewed and the concepts of controllability and observability are discussed. Design methods of deterministic observers are presented and optimal control theory is formulated. Control techniques for modifying system characteristics are discussed.

0101	Hosam Fathy	Seats (Total: 25)
	MW 12:30pm - 1:45pm	EGR 3106

ENME610

Engineering Optimization

Credits: 3

Grading Method: Regular,
Audit

Overview of applied single- and multi- objective optimization and decision making concepts and techniques with applications in engineering design and/or manufacturing problems. Topics include formulation examples, concepts, optimality conditions, unconstrained/constrained methods, and post-optimality sensitivity analysis. Students are expected to work on a semester-long real-world multi-objective engineering project.

0101	Amr Baz	Seats (Total: 30)
	TuTh 5:00pm - 6:15pm	EGR 2116

ENME670

Continuum Mechanics

Credits: 3 Grading Method: Regular,
Audit

Mechanics of deformable bodies, finite deformation and strain measures, kinematics of continua and global and local balance laws. Thermodynamics of continua, first and second laws. Introduction to constitutive theory for elastic solids, viscous fluids and memory dependent materials. Examples of exact solutions for linear and hyper elastic solids and Stokesian fluids.

0101	Teng Li	Seats (Total: 25)
	MW 11:00am - 12:15pm	EGR 3106

ENME690

Mechanical Fundamentals of Electronic Systems

Credits: 3 Grading Method: Regular,
Audit

An understanding of the fundamental mechanical principles used in design of electronic devices and their integration into electronic systems will be provided. Focus will be placed on the effect of materials compatibility, thermal stress, mechanical stress, and environmental exposure on product performance, durability and cost. Both electronic devices and package assemblies will be considered. Analysis of package assemblies to understand thermal and mechanical stress effects will be emphasized through student projects.

0101	Bongtae Han	Seats (Total: 25)
	MW 2:00pm - 3:15pm	JMP 2121
ER01	Bongtae Han	Seats (Total: 15)
	Class time/details on ELMs	ONLINE
RE01	Bongtae Han	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

ENME701

Sustainable Energy Conversion and the Environment

Credits: 3 Grading Method: Regular,
Audit

Recommended: ENME633. Credit only granted for: ENME701, ENME706 or ENME808D. Formerly: ENME706 and ENME808D.

Discussion of the major sources and end-uses of energy in our society with particular emphasis on renewable energy production and utilization. Introduces a range innovative technologies and discusses them in the context of the current energy infrastructure. Renewable sources such as wind and solar are discussed in detail. Particular attention is paid to the environmental impact of the various forms of energy.

0101	Jiazhen Ling, K Radermacher Tu 4:00pm - 6:40pm	Seats (Total: 25) JMP 2217
ME01	Jiazhen Ling, K Radermacher Class time/details on ELMs	Seats (Total: 10) ONLINE

ENME704 **Active Vibration Control**

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENME662 and ENME602; or students who have taken courses with comparable content may contact the department. Recommended: Completion of coursework or background in Vibrations and Control recommended. Restriction: Must be in a major in ENGR-A. James Clark School of Engineering.

This course aims at introducing the basic principles of the finite element method and applying it to plain beams and beams treated with piezoelectric actuators & sensors. The basic concepts of structural parameter identification are presented with emphasis on Eigensystem Realization Algorithms (ERA) and Auto-regression models (AR). Different active control algorithms are then applied to beams/piezo-actuator systems. Among these algorithms are: direct velocity feedback, impedancematchingcontrol, modal control methods & sliding mode controllers. Particular focus is given to feedforward Least Mean Square (LMS) algorithm & filtered-X LMS. Optimal placement strategies of sensor & actuators are then introduced & applied to beam/piezo-actuator systems.

0101	Amr Baz MW 5:00pm - 6:15pm	Seats (Total: 25) EGR 1102
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ENME737 **Prognostics and Health Management**

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: ENME737 or ENME808A. Formerly: ENME808A.

Prognostics and health management (PHM) is an enabling discipline consisting of technologies and

0101	Michael Pecht M 9:30am - 12:10pm	Seats (Total: 25) JMP 2216
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Learn how to apply techniques from Artificial Intelligence and Machine Learning to solve engineering problems and design new products or systems. Design and build a personal or research project that demonstrates how computational learning algorithms can solve difficult tasks in areas you are interested in. Master how to interpret and transfer state-of-the-art techniques from computer science to practical engineering situations and make smart implementation decisions.

0101	Mark Fuge	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	CHE 2136

ENME744 Additive Manufacturing

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: ENME272 and ENME331; or students who have taken courses with comparable content may contact the department. Jointly offered with ENME416. Credit only granted for: ENME 416 OR ENME 744.

Develop a comprehensive understanding of fundamental additive manufacturing-alternatively, "three-dimensional (3D) printing"-approaches, including extrusion-based deposition, stereolithography, powder bed-based melting, and inkjet-based deposition. Cultivate a "design-for-additive manufacturing" skill set for combining computer-aided design (CAD) and computer-aided manufacturing (CAM) methodologies to produce successful 3D prints. Fabricate 3D mechanical objects using a variety of 3D printing technologies on campus. Execute a design project that demonstrates how additive manufacturing technologies can overcome critical limitations of traditional manufacturing processes.

DE01	Ryan Sochol	Seats (Total: 15)
	Class time/details on ELMs	ONLINE

ENME746 Medical Robotics

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: ENME361. Credit only granted for: ENME808M, ENME489C or ENME746. Formerly: ENME808M, ENME489C.

The evolution of robotics in surgery is a new and exciting development. Surgical robotics brings together many disparate areas of research such as development and modeling of robotic systems, design, control, safety in medical robotics, haptics (sense of touch), ergonomics in minimally invasive procedures, and last but not the least, surgery. The primary goal of this course is to acquaint the students with the fundamentals of robot design and control and different areas of research that lead to the development of medical robotic systems. As a result, the course will cover basic robot kinematics such as forward and inverse kinematics as well as velocity and acceleration analysis. We will also cover additional topics specific to medical robotics such as medical image guidance. The course will include a project, where students will learn to develop, build, and control a medical robot.

0101	Axel Krieger	Seats (Total: 10)
	MW 2:00pm - 3:15pm	EGR 0135

ENME770 Life Cycle Cost and System Sustainment Analysis

Credits: 3 Grading Method: Regular,
Audit

This course melds elements of traditional engineering economics with manufacturing process and sustainment modeling, and life cycle cost management concepts to form a practical foundation for predicting the cost of products and systems. Various manufacturing cost analysis methods will be presented including: process-flow, parametric, cost of ownership, and activity based costing. The effects of learning curves, data uncertainty, test and rework processes, and defects will be considered. Aspects of system sustainment including the impact on the life cycle (and life cycle costs) of reliability, maintenance, environmental impact, and obsolescence will be treated.

0101	Peter Sandborn	Seats (Total: 25)
	Tu 1:00pm - 3:40pm	JMP 2222
ER01	Peter Sandborn	Seats (Total: 10)
	Class time/details on ELMs	ONLINE
RE01	Peter Sandborn	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

ENME799 Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

ENME808 Advanced Topics in Mechanical Engineering

Credits: 3 Grading Method: Regular,
Audit

Contact department for information to register for this course.

ENME808T Advanced Topics in Mechanical Engineering; Network Control Systems

Credits: 3 Grading Method: Regular,
Audit

0101	Yancy Diaz-Mercado	Seats (Total: 25)
	MW 3:30pm - 4:45pm	EGR 3114

ENME808U Advanced Topics in Mechanical Engineering; Modern Climate Control and Building Energy Design/Analysis

Credits: 2-3 Grading Method: Regular,
Audit

0101	Jelena Srebric	Seats (Total: 5)
	TuTh 12:30pm - 1:45pm	EGR 0135

ENME898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular
Contact department for information to register for this course.

ENME899 Doctoral Dissertation Research

(Perm req) Credits: 6 Grading Method: Regular
Contact department for information to register for this course.

ENPM Engineering, Professional Masters Fall 2019

ENPM600 Probability and Stochastic Processes for Engineers

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Undergraduate introduction to discrete and continuous probability.

Axioms of probability; conditional probability and Bayes' rule; random variables, probability distributions and densities; functions of random variables; definition of stochastic process; stationary processes, correlation functions, and power spectral densities; stochastic processes and linear systems; estimation and optimum filtering. Applications in communication and control systems, signal processing, and detection and estimation.

0101	C Ravishankar	Seats (Total: 29)
	M 7:00pm - 9:40pm	JMP 2217
SG01	C Ravishankar	Seats (Total: 5)
	M 7:00pm - 9:40pm	Location: TBA
SM01	C Ravishankar	Seats (Total: 5)
	M 7:00pm - 9:40pm	Location: TBA

ENPM603 Theory and Applications of Digital Signal Processing

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Undergraduate introduction to discrete-time systems.

Uniform sampling and the sampling theorem; the Z-transform and discrete-time system analysis; multi-rate systems; discrete-time random processes; methods for designing FIR and IIR digital filters; effects of quantization and finite work-length; the DFT and FFT; power spectrum estimation.

0101	Emre Gunduzhan	Seats (Total: 17)
	Tu 4:00pm - 6:40pm	JMP 2216
SG01	Emre Gunduzhan	Seats (Total: 5)
	Tu 4:00pm - 6:40pm	Location: TBA
SM01	Emre Gunduzhan	Seats (Total: 5)
	Tu 4:00pm - 6:40pm	Location: TBA

ENPM609 Microprocessor-Based Design

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have completed undergraduate courses in logic design, computer architecture, and programming.

Introduction to microprocessor components, software, and tools. Architectures, instruction sets, and assembly language programming for a commercial microprocessor family. Real-time programming techniques. Peripheral chips such as, parallel ports, counter-timers, DMA controllers, interrupt controllers, and serial communication units. Design projects emphasizing integrated hardware and software solutions to engineering problems.

0101	Manoj Franklin	Seats (Total: 25)
	W 7:00pm - 9:40pm	JMP 2217
SG01	Manoj Franklin	Seats (Total: 5)
	W 7:00pm - 9:40pm	Location: TBA
SM01	Manoj Franklin	Seats (Total: 5)
	W 7:00pm - 9:40pm	Location: TBA

ENPM611 Software Engineering

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Competency in one programming language; and must have completed an undergraduate software engineering course.

Software engineering concepts, methods, and practices important to both the theorist and the practitioner will be covered. The entire range of responsibilities expected of a software engineer are presented. The fundamental areas of requirements development, software design, programming languages, and testing are covered extensively. Sessions on supporting areas such as systems engineering, project management, and software estimation are also included.

0101	Christopher Ackermann M 4:00pm - 6:40pm	Seats (Total: 39) JMP 2222
DE01	Christopher Ackermann Class time/details on ELMs	Seats (Total: 10) ONLINE
SG01	Christopher Ackermann M 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SM01	Christopher Ackermann M 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

ENPM613

Software Design & Implementation

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENPM611. Restriction: Permission of ENGR-CDL-Office of Advanced Engineering Education.

Software design concepts and practices within the field important to both the practitioner and the theorist will be covered. Architectural and detailed designs are included for batch, client/server, and real-time systems. Design considerations for structured, object-oriented, and Web-based systems are covered. Design of databases, user interfaces, forms, and reports are also included. Implementation issues that affect the design, including error handling, performance, and inter-process communication, are presented.

0101	Ioana Rus W 7:00pm - 9:40pm	Seats (Total: 40) JMP 2121
DE01	Ioana Rus Class time/details on ELMs	Seats (Total: 10) ONLINE
SG01	Ioana Rus W 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

SM01	Ioana Rus	Seats (Total: 5)
	W 7:00pm - 9:40pm	Location: TBA

ENPM617

Compilers

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: ENPM808T, ENEE645, or ENPM617. Formerly: ENPM808T.

Covers the underlying techniques of Compiler Construction and introduces the theory and tools that can be employed in order to perform syntax-directed translation of a high-level programming language into an executable code.

0101	Jerry Wu	Seats (Total: 25)
	Th 4:00pm - 6:40pm	JMP 2217
SG01	Jerry Wu	Seats (Total: 5)
	Th 4:00pm - 6:40pm	Location: TBA
SM01	Jerry Wu	Seats (Total: 5)
	Th 4:00pm - 6:40pm	Location: TBA

ENPM620

Computer Aided Engineering Analysis

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of ENGR-Office of Advanced Engineering Education. Credit only granted for: ENPM620 or ENRE620/ENNU620.

Computer assisted approach to the solution of engineering problems. Review and extension of undergraduate material in applied mathematics including linear algebra, vector calculus, differential equations, and probability and statistics.

A laptop or Tablet PC is required for in-class use.

0101	Gilad Sharon	Seats (Total: 17)
	M 7:00pm - 9:40pm	JMP 2120
ME01	Gilad Sharon	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

SG01	Gilad Sharon	Seats (Total: 5)
	M 7:00pm - 9:40pm	Location: TBA
SM01	Gilad Sharon	Seats (Total: 5)
	M 7:00pm - 9:40pm	Location: TBA

ENPM622
Energy Conversion I - Stationary Power

Credits: 3

Grading Method: Regular,
Audit

Thermal engineering of modern power generation systems. Cycle analysis of various modern power generation technologies including gas turbine, combined cycle, waste burning and cogeneration. Energy storage and energy transport.

0101	Patrick Caton	Seats (Total: 30)
	Th 7:00pm - 9:40pm	JMP 2216
ME01	Patrick Caton	Seats (Total: 20)
	Class time/details on ELMs	ONLINE
SG01	Patrick Caton	Seats (Total: 5)
	Th 7:00pm - 9:40pm	Location: TBA
SM01	Patrick Caton	Seats (Total: 5)
	Th 7:00pm - 9:40pm	Location: TBA

ENPM623
Engineering Combustion Emissions for Air Pollution Control

Credits: 3

Grading Method: Regular,
Audit

Analysis of the sources and mechanisms of combustion generated air pollution. Air pollution due to internal combustion engines, power generation and industrial emissions. Techniques to minimize and control emission.

0101	Jim Cowart	Seats (Total: 30)
	Tu 7:00pm - 9:40pm	JMP 2121
SG01	Jim Cowart	Seats (Total: 5)
	Tu 7:00pm - 9:40pm	Location: TBA

SM01	Jim Cowart	Seats (Total: 5)
	Tu 7:00pm - 9:40pm	Location: TBA

ENPM624 Renewable Energy Applications

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Knowledge of thermodynamics, fluid mechanics, and heat transfer; and permission of ENGR-Office of Advanced Engineering Education. Credit only granted for: ENPM624 or ENME701.

Thermodynamics and heat transfer of renewable energy sources for heating, power generation and transportation. Wind energy, solar thermal, photovoltaic, biomass, waste burning, and hydropower. Broad overview of the growing use of renewable energy sources in the world economy with detailed analysis of specific applications.

0101	Michael Ohadi, Brian Valentine, Farah Singer	Seats (Total: 17)
	Th 7:00pm - 9:40pm	JMP 2120
ME01	Farah Singer, Michael Ohadi, Brian Valentine	Seats (Total: 20)
	Class time/details on ELMs	ONLINE
SG01	Brian Valentine, Farah Singer, Michael Ohadi	Seats (Total: 5)
	Th 7:00pm - 9:40pm	Location: TBA
SM01	Brian Valentine, Farah Singer, Michael Ohadi	Seats (Total: 5)
	Th 7:00pm - 9:40pm	Location: TBA

ENPM635 Thermal Systems Design Analysis

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: ENPM635 or ENME635.

Evaluates the trade-offs associated with thermal systems. Use of software for system simulation, evaluation and optimization. Applications include power and refrigeration systems, electronics cooling, distillation columns, dehumidifying coils, and co-generation systems.

0101	Karim Amrane W 4:00pm - 6:40pm	Seats (Total: 25) JMP 2217
ME01	Karim Amrane Class time/details on ELMs	Seats (Total: 20) ONLINE
SG01	Karim Amrane W 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SM01	Karim Amrane W 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

ENPM640

Rehabilitation Robotics

Credits: 3 Grading Method: Regular,
Audit

Recommended: Basic understanding of linear time-invariant control systems (e.g. ENPM667) is preferred but not required. No background or previous experience in assistive robotics, human biomechanics, and/or neuroscience is required. Credit only granted for: ENPM808J, ENPM640, or ENME444. Formerly: ENPM808J.

An introduction to a field of robotics dedicated to improving the lives of people with disabilities. The course is designed for students wishing to learn more about rehabilitation robotics, one of the fastest growing fields of robotics. Rehabilitation robotics is the application of robots to overcome disabilities resulting from neurologic injuries and physical trauma, and improve quality of life. This course considers not only engineering design and development, but also the human factors that make some innovative technologies successful and others commercial failures. Engineering innovation by itself, without considering other factors such as evidence-based R&D and product acceptance, may mean that some technologies don't become or remain available or are inefficacious to aid their intended beneficiaries. This course differs from medical robotics in its focus on improving the quality of life through robot-mediated rehabilitation treatments, rather than improving or enhancing applications such as surgical interventions.

0101	Anindo Roy W 4:00pm - 6:40pm	Seats (Total: 38) JMP 2216
SG01	Anindo Roy W 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SM01	Anindo Roy W 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

Human-Robot Interaction

Recommended: Some knowledge of A.I. fundamentals and data analytics recommended, but not required. Credit only granted for: ENPM808K or ENPM645. Formerly: ENPM808K.

To define the intersection of human-robot interactions to include human-computer interfaces, as well as robotic emotions and facial expressions emulations. The result will provide a basis for students to assess the best approaches for interacting effectively with robots. Areas to be covered include biologically-inspired robotics, cognitive robotics, cultural and social aspects of robotics, data mining, examples of human systems interfaces, and machine learning with respect to A.I. principles and limitations.

0101	Josef Schaff Th 7:00pm - 9:40pm	Seats (Total: 52) JMP 2121
DE01	Josef Schaff Class time/details on ELMs	Seats (Total: 15) ONLINE
FL01	Josef Schaff Th 7:00pm - 9:40pm <i>This section is for NAVAIR Cohort students located in Florida only.</i>	Seats (Total: 5) Location: TBA
SG01	Josef Schaff Th 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Josef Schaff Th 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

Introduction to Robot Modeling

Credit only granted for: ENPM662 or ENPM808M. Formerly: ENPM808M.

This course introduces basic principles for modeling a robot. Most of the course is focused on modeling manipulators based on serial mechanisms. The course begins with a description of the homogenous transformation and rigid motions. It then introduces concepts related to kinematics, inverse kinematics, and Jacobians. This course then introduces Eulerian and Lagrangian Dynamics. Finally, the course concludes by introducing basic principles for modeling manipulators based on parallel mechanisms. The concepts introduced in this course are subsequently utilized in control and planning courses.

0101	Chad Kessens W 4:00pm - 6:40pm	Seats (Total: 40) JMP 2121
0201	Chad Kessens W 7:00pm - 9:40pm	Seats (Total: 40) KEB 1110
0301	Sean Gart Tu 4:00pm - 6:40pm	Seats (Total: 40) JMP 3201
DE01	Chad Kessens Class time/details on ELMs	Seats (Total: 10) ONLINE
FL01	Chad Kessens W 4:00pm - 6:40pm <i>This section is for NAVAIR Cohort students located in Florida only.</i>	Seats (Total: 5) Location: TBA
SG01	Chad Kessens W 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SM01	Chad Kessens W 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

ENPM667

Control of Robotic Systems

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: ENPM667 or ENPM808Q. Formerly: ENPM808Q.

This is a basic course on the design of controllers for robotic systems. The course starts with mainstay principles of linear control, including a review of elementary concepts of systems, and discusses applications to independent joint control. The second part of the course introduces a physics-based approach to control design that uses energy and optimization principles to tackle the design of controllers that exploit the underlying dynamics of robotic systems. The course ends with an introduction to force control and basic principles of geometric control if time allows.

0101	Waseem Malik M 7:00pm - 9:40pm	Seats (Total: 40) JMP 3201
0201	Waseem Malik M 4:00pm - 6:40pm	Seats (Total: 29) JMP 2217

0301	Olusesan Iwarere W 7:00pm - 9:40pm	Seats (Total: 40) JMP 3201
DE01	Waseem Malik Class time/details on ELMs	Seats (Total: 10) ONLINE
FL01	Waseem Malik M 7:00pm - 9:40pm <i>This section is for NAVAIR Cohort students located in Florida only.</i>	Seats (Total: 5) Location: TBA
SG01	Waseem Malik M 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Waseem Malik M 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM674

Design and Synthesis of Digital Systems

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENEE140, ENEE150, and ENEE350; or students who have taken courses with comparable content may contact the department. Recommended: ENEE446.

Students will be introduced to HDL-based design of modern digital systems, and will cover in depth the design and implementation of digital systems using the Verilog HDL. Students will learn fundamental concepts of the Verilog language; modeling of complex digital systems; simulation and verification; and Verilog coding styles for synthesis. Hands-on experience will be developed through practical designs, exercises, and projects. Students will use state-of-the-art EDA tools to design, simulate, and test digital systems. The latter part of the course will focus on customized programmable platforms such as graphics processors (GPUs) multicore platforms and FPGAs as well as coding, building, and debugging for such platforms.

0101	George Zaki Th 7:00pm - 9:40pm	Seats (Total: 25) JMP 2217
SG01	George Zaki Th 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	George Zaki Th 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM677**Wireless Sensor Networks**

Credits: 3 Grading Method: Regular,
Audit

Focuses on networking aspects, protocols and architectures for Wireless Sensor Networks. Provides a thorough description of the most important issues and questions that have to be addressed in a wireless sensor network.

0101	Sasan Haghani	Seats (Total: 17)
	Tu 7:00pm - 9:40pm	JMP 2217
SG01	Sasan Haghani	Seats (Total: 5)
	Tu 7:00pm - 9:40pm	Location: TBA
SM01	Sasan Haghani	Seats (Total: 5)
	Tu 7:00pm - 9:40pm	Location: TBA

ENPM687**Digital Forensics and Incident Responses**

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Experience with both Windows and Unix-based operating systems, including using the command line. Credit only granted for: ENPM808P or ENPM687. Formerly: ENPM808P.

Students will implement a robust incident response methodology, including proper forensic handling of evidence, and cover legal aspects of national and international law regarding forensics. The bulk of the course covers evidence acquisition, preservation, analysis and reporting on multiple platforms.

CY01	Jonas Amoonarquah	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

ENPM691**Hacking of C programs and Unix Binaries**

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENEE150; or students who have taken courses with comparable content may contact the department.

Teaches the fundamentals of secure programming in C. An in depth discussion on various security vulnerabilities (e.g., buffer overflows) in C applications will be taught with hands-on demo of concepts during the class. Students will learn how a C program runs "under-the-hood". The course will teach nitty-gritty of C programs by analyzing at the assembly level. The course discusses best practices (e.g., coding standards) and design principles for secure programming so that security can be built-in during design time. In addition to assignments, students are required to present papers related to this course.

0101	Dharmalingam Ganesan Th 7:00pm - 9:40pm	Seats (Total: 80) JMP 3201
CY01	Dharmalingam Ganesan Class time/details on ELMs	Seats (Total: 20) ONLINE
SG01	Dharmalingam Ganesan Th 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Dharmalingam Ganesan Th 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM694

Networks and Protocols

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: ENPM694 or ENPM808A. Formerly: ENPM808A.

Provides a deep understanding of TCP/IP protocol suit and routing in the internet. The course topics are: overview of TCP/IP, basics of IP protocol, basics of TCP protocol, Network Address Translation (NAT), Dynamic Host Configuration Protocol (DHCP), Internet Protocol Security (IPsec), Internet Control Message Protocol (ICMP), Simple Mail Transfer Protocol (SMTP), Domain Name Service (DNS), IPv6, Concepts of routing (Bellman-Ford and Dijkstra algorithms), Routing Information Protocol (RIP), Open Shortest Path First (OSPF), Interior Gateway Routing Protocol (IGRP), Enhance Gateway Routing Protocol (EIGRP), and Border Gateway Protocol (BGP).

0101	Majid Raissi-Dehkordi Tu 7:00pm - 9:40pm	Seats (Total: 65) JMP 3201
CY01	Majid Raissi-Dehkordi Class time/details on ELMs	Seats (Total: 30) ONLINE
SG01	Majid Raissi-Dehkordi Tu 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Majid Raissi-Dehkordi Tu 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM696

Reverse Software Engineering

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENPM691 and CMSC106; or permission of instructor. And permission of ENGR-CDL-Office of Advanced Engineering Education. Credit only granted for: ENPM808F or ENPM696. Formerly: ENPM808F.

An in-depth understanding of software reverse engineering concepts and hands-on training with reverse engineering tools, including disassemblers, decompilers, and code analyzers. Students will become familiar with both low-level software and the x86 instruction set through binary reversing sessions. This course also provides insights into many subjects such as system security, source code analysis, software design, and program understanding that will be beneficial in a variety of fields.

0101	Allen Hazelton Tu 4:00pm - 6:40pm	Seats (Total: 50) JMP 2121
CY01	Allen Hazelton Class time/details on ELMs	Seats (Total: 20) ONLINE
SG01	Allen Hazelton Tu 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SM01	Allen Hazelton Tu 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

ENPM808

Advanced Topics in Engineering

(Perm req)

Credits: 1-3

Grading Method: Regular,
Audit

Advanced topics selected by the faculty for students in the professional master of engineering program. May be taken for repeated credit when identified by topic title.

0101	George Syrmos Contact instructor or department for details.	Seats (Total: 40)
0201	Qingbin Cui Contact instructor or department for details.	Seats (Total: 1)
0301	Mikael Lindvall Contact instructor or department for details.	Seats (Total: 1)

ENPM808W

Advanced Topics in Engineering; Data Science

Credits: 3

Grading Method: Regular,
Audit

*Advanced topics selected by the faculty for students in the professional master of engineering program.
May be taken for repeated credit when identified by topic title.*

0101	A Seyed W 7:00pm - 9:40pm	Seats (Total: 35) JMP 2216
DE01	A Seyed Class time/details on ELMs	Seats (Total: 5) ONLINE
SG01	A Seyed W 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	A Seyed W 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM808X Advanced Topics in Engineering; Software Development for Robotics

(Perm req)

Credits: 3 Grading Method: Regular,
 Audit

*Advanced topics selected by the faculty for students in the professional master of engineering program.
May be taken for repeated credit when identified by topic title.*

Prerequisite: ENPM809Y or equivalent

0101	David Pietrocola M 4:00pm - 6:40pm	Seats (Total: 50) JMP 2121
DE01	David Pietrocola Class time/details on ELMs	Seats (Total: 35) ONLINE
FL01	David Pietrocola M 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SG01	David Pietrocola M 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SM01	David Pietrocola M 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

ENPM809A Special Topics in Engineering; Applied Cryptography

Credits: 3 Grading Method: Regular,
Audit

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Dharmalingam Ganesan Th 4:00pm - 6:40pm	Seats (Total: 38) JMP 2216
CY01	Dharmalingam Ganesan Class time/details on ELMs	Seats (Total: 20) ONLINE
SG01	Dharmalingam Ganesan Th 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA
SM01	Dharmalingam Ganesan Th 4:00pm - 6:40pm	Seats (Total: 5) Location: TBA

ENPM809F Special Topics in Engineering; Internet of Things

Credits: 3 Grading Method: Regular,
Audit

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Nof Abu Zainab Tu 7:00pm - 9:40pm	Seats (Total: 35) JMP 2216
DE01	Nof Abu Zainab Class time/details on ELMs	Seats (Total: 5) ONLINE
SG01	Nof Abu Zainab Tu 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA
SM01	Nof Abu Zainab Tu 7:00pm - 9:40pm	Seats (Total: 5) Location: TBA

ENPM809N Special Topics in Engineering; Data Mining

Credits: 3 Grading Method: Regular,
Audit

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Deogratias Kibira	Seats (Total: 17)
	Tu 7:00pm - 9:40pm	JMP 2120
SG01	Deogratias Kibira	Seats (Total: 5)
	Tu 7:00pm - 9:40pm	Location: TBA
SM01	Deogratias Kibira	Seats (Total: 5)
	Tu 7:00pm - 9:40pm	Location: TBA

ENPM809Q Special Topics in Engineering; Penetration Testing

Credits: 3 Grading Method: Regular,
Audit

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Kevin Shivers	Seats (Total: 65)
	M 7:00pm - 9:40pm	KEB 1110
0201	Kevin Shivers	Seats (Total: 39)
	Th 4:00pm - 6:40pm	JMP 2121
CY01	Kevin Shivers	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

ENPM809V Special Topics in Engineering; Bitcoin and Cryptocurrency Technologies

Credits: 3 Grading Method: Regular,
Audit

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Charalampos Papamanthou	Seats (Total: 50)
	Th 7:00pm - 9:40pm	KEB 1110

CY01	Charalampos Papamantou	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

ENPM809Y Special Topics in Engineering; Introductory Robot Programming

Credits: 3 Grading Method: Regular,
Audit

Special topics selected by the faculty for students in the professional master of engineering and graduate certificate in engineering program. May be taken for repeated credit when identified by topic title.

0101	Zeid Kootbally	Seats (Total: 80)
	Tu 7:00pm - 9:40pm	KEB 1110
DE01	Zeid Kootbally	Seats (Total: 15)
	Class time/details on ELMs	ONLINE

ENRE Reliability Engineering Fall 2019

ENRE489 Special Topics in Reliability Engineering

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Selected topics of current importance in reliability engineering.

Contact department for information to register for this course.

ENRE600 Fundamentals of Failure Mechanisms

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of ENGR-Materials Science & Engineering department. Cross-listed with ENMA626. Credit only granted for: ENMA626, ENMA698M, ENMA698R, or ENRE600.

Advanced failure mechanisms in reliability engineering will be taught from a basic materials and defects point of view. The methods of predicting the physics of failure of devices, materials, components and systems are reviewed. The main emphasis will be given to basic degradation mechanisms through understanding the physics, chemistry, and mechanics of such mechanisms. Mechanical failures are introduced through understanding fatigue, creep and yielding in materials, devices and components. The principles of cumulative damage and mechanical yielding theory are taught. The concepts of reliability growth, accelerated life testing, environmental testing are introduced. Physical, chemical and thermal related failures are introduced through a basic understanding of degradation mechanisms such as diffusion, electromigration, defects and defect migration. The failure mechanisms in basic material types will be taught. Failure mechanisms observed in real electronic devices and electronic packaging will also be presented. Problems related to manufacturing, and microelectronics will be analyzed. Mechanical failures are emphasized from the point of view of complex fatigue theory.

Those sections that begin with a letter are taught via ITV and are not intended for College Park campus students.

0101	Aristos Christou, Thomas Martin M 1:00pm - 3:40pm	Seats (Total: 20) JMP 2217
ER01	Thomas Martin, Aristos Christou Class time/details on ELMs	Seats (Total: 20) ONLINE
RE01	Aristos Christou, Thomas Martin Contact instructor or department for details.	Seats (Total: 4)
SM01	Thomas Martin, Aristos Christou Contact instructor or department for details.	Seats (Total: 5)

ENRE602

Principles of Reliability Analysis

Credits: 3 Grading Method: Regular,
 Audit

Cross-listed with ENNU652. Credit only granted for: ENRE602 or ENNU652.

Principal methods of reliability analysis, including fault tree and reliability block diagrams; Failure Mode and Effects Analysis (FMEA); event tree construction and evaluation; reliability data collection and analysis; methods of modeling systems for reliability analysis. Focus on problems related to process industries, fossil-fueled power plant availability, and other systems of concern to engineers.

Those sections that begin with a letter are taught via ITV and are not intended for College Park campus students.

0101	Katrina Groth W 1:00pm - 3:40pm	Seats (Total: 17) JMP 2217
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ER01	Katrina Groth	Seats (Total: 25)
	Class time/details on ELMs	ONLINE
RE01	Katrina Groth	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

ENRE641 Probabilistic Physics of Failure and Accelerated Testing

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: ENRE641 or ENRE650. Formerly: ENRE650.

Models for life testing at constant stress. Graphical and analytical methods. Test plans for accelerated testing. Competing failure modes and size effects. Models and data analyses for step and time varying stresses. Optimizing of test plans.

0101	Mohammad Modarres	Seats (Total: 15)
	Th 11:00am - 1:40pm	JMP 2222
ER01	Mohammad Modarres	Seats (Total: 15)
	Class time/details on ELMs	ONLINE
RE01	Mohammad Modarres	Seats (Total: 15)
	Class time/details on ELMs	ONLINE
SG01	Mohammad Modarres	Seats (Total: 5)
	Class time/details on ELMs	ONLINE
SM01	Mohammad Modarres	Seats (Total: 5)
	Class time/details on ELMs	ONLINE

ENRE648 Special Problems in Reliability Engineering

(Perm req) Credits: 1-6 Grading Method: Regular,
Audit

For students who have definite plans for individual study of approved problems. Credit given according to extent of work.

Contact department for information to register for this course.

ENRE648J Special Problems in Reliability Engineering; Prognostics and Health Management

Credits: 3 Grading Method: Regular, Audit

For students who have definite plans for individual study of approved problems. Credit given according to extent of work.

0101	Michael Pecht	Seats (Total: 25)
	M 9:30am - 12:10pm	JMP 2216
ER01	Michael Pecht	Seats (Total: 10)
	Class time/details on ELMs	ONLINE
RE01	Michael Pecht	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

ENRE655 **Advanced Methods in Reliability Modeling**

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENRE602. Credit only granted for: ENRE655 or ENRE665. Formerly: ENRE665.

Bayesian methods and applications, estimation of rare event frequencies, uncertainty analysis and propagation methods, reliability analysis of dynamic systems, analysis of dependent failures, reliability of repairable systems, human reliability analysis methods and theory of logic diagrams and application to systems reliability.

Contact department for information to register for this course.

ENRE670 Probabilistic Risk Assessment

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENRE602.

Why study risk, sources of risk, overview of Risk Assessment and Risk Management, relation to System Safety and Reliability Engineering; measures, representation, communication, and perception of risk; overview of use of risk assessment results in decision making; overview of Probabilistic Risk Assessment (PRA) process; detailed converge of PRA methods including (1) methods for risk scenario development such as identification of initiators, event sequence diagrams, event trees, causal modeling (fault trees, influence diagrams, and hybrid methods), and simulation approaches; (2) methods of risk scenario likelihood assessment, including quantitative and qualitative approaches, as well as uncertainty modeling and analysis. Also covers methods for risk modeling of system hardware behavior, physical phenomena, human behavior, software behavior, organizational environment, and external physical environment. Additional core topics include risk model integration and quantification (Boolean-based, binary decision diagram, Bayesian belief networks, and hybrid methods), simulation-based Dynamic PRA methods (discrete and continuous) and several examples of large scale PRAs for space missions, nuclear power, aviation and medical systems.

0101	Mohammad Modarres Th 3:00pm - 5:40pm	Seats (Total: 17) JMP 2222
ER01	Mohammad Modarres Class time/details on ELMs	Seats (Total: 15) ONLINE
RE01	Mohammad Modarres Class time/details on ELMs	Seats (Total: 10) ONLINE

ENRE684

Information Security

Credits: 3 Grading Method: Regular,
Audit

Jointly offered with ENME442. Credit only granted for: ENME442, ENRE648 J, or ENRE684. Formerly: ENRE648J.

This course is divided into three major components: overview, detailed concepts and implementation techniques. The topics to be covered are: general security concerns and concepts from both a technical and management point of view, principles of security, architectures, access control and multi-level security, trojan horses, covert channels, trap doors, hardware security mechanism, security models, security kernels, formal specifications and verification, networks and distribution systems and risk analysis.

0101	Michel Cukier TuTh 9:30am - 10:45am	Seats (Total: 5) JMP 2222
ER01	Michel Cukier Contact instructor or department for details.	Seats (Total: 10)

RE01	Michel Cukier	Seats (Total: 5)
Contact instructor or department for details.		

ENRE689E Special Topics in Engineering Materials; Operations Research Models in Engineering

Credits: 3 Grading Method: Regular,
Audit

Jointly offered with ENME741. Credit only granted for: ENME738, ENME741, ENRE808E, ENCE603. Formerly: ENME738.

0101	Steven Gabriel	Seats (Total: 15)
	W 8:30am - 11:00am	JMP 2120
ER01	Steven Gabriel	Seats (Total: 10)
	Class time/details on ELMs	ONLINE
RE01	Steven Gabriel	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

ENRE799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

ENRE898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

ENRE899 Doctoral Dissertation Research

(Perm req) Grading Method: Regular, Sat-
Credits: 6 Fail

Contact department for information to register for this course.

ENSE Systems Engineering Fall 2019

ENSE621 Systems Engineering Concepts and Processes: A Model-Based Approach

(Perm req) Grading Method: Regular,
Credits: 3 Audit

Restriction: Permission of ENGR-Institute for Systems Research. Credit only granted for: ENPM641 or ENSE621.

An INCOSE-oriented introduction to model-based systems engineering. Provides an overview of systems engineering concepts, processes and methods, with a particular focus on: the development of stakeholder and system requirements; characteristics of well-written requirements; the use of SysML software tools to develop of system- and element-level architectures; and the relationship between requirements and architecture. Architecture-related topics include specification and visualization of system attributes, behavior, and interfaces. Other topics include acquisition and development life cycle models; operational concepts and use cases; requirements and design traceability; analysis, modeling and simulation; systems engineering management; risk management; configuration management; systems-of-systems; and system complexity. The course includes a class project in which teams of 3-5 students use SysML to develop stakeholder requirements, system requirements, and a logical system architecture for an engineered system of interest to them and then perform a design trade-off analysis for some aspect of the system.

0101	Tony Barber M 7:00pm - 9:40pm	Seats (Total: 18) JMP 2216
0201	Timothy Eveleigh Tu 7:00pm - 9:40pm	Seats (Total: 22) JMP 2222
DE01	Tony Barber Class time/details on ELMs	Seats (Total: 4) ONLINE
DE02	Timothy Eveleigh Class time/details on ELMs	Seats (Total: 8) ONLINE
SG01	Tony Barber M 7:00pm - 9:40pm	Seats (Total: 4) Location: TBA
SM01	Tony Barber M 7:00pm - 9:40pm	Seats (Total: 4) Location: TBA

ENSE623 System Development, Verification, and Validation

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of ENGR-Institute for Systems Research; and ENSE622. Credit only granted for: ENPM643 or ENSE623.

This course completes the ENSE621, ENSE622 sequence. It covers system simulation development and a variety of verification and validation topics. It addresses development testing and operational testing; test methodologies; the planning of test programs and Test and Evaluation Master Plans (TEMPs); the planning and execution of tests; and the writing of test plans and test reports. Topics include verification methods; specification-based testing; test verification matrices; model-based verification; model checking and other formal approaches to verification; design of experiments; performance testing; reliability testing; usability/human factors testing; and other types of testing. The course includes a class project in which teams of 3-5 students: develop requirements for a simulation that supports a system analysis of interest (the user need); develop the simulation (in MATLAB); verify that it meets its requirements; and validate that it may be used to support the analysis of interest.

0101	Steven Biemer W 7:00pm - 9:40pm	Seats (Total: 16) JMP 2222
DE01	Steven Biemer Class time/details on ELMs	Seats (Total: 4) ONLINE
SG01	Steven Biemer W 7:00pm - 9:40pm	Seats (Total: 4) Location: TBA
SM01	Steven Biemer W 7:00pm - 9:40pm	Seats (Total: 4) Location: TBA

ENSE626

(Perm req)

System Life Cycle Analysis and Risk Management

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: Permission of ENGR-Institute for Systems Research.

This course covers topics related to estimating the costs and risks incurred through the lifetimes of projects, products and systems. In addition, treatment is given to methods that determine the drivers of costs and risks and facilitate determination of the most effective alternatives to reducing them. Also covered, are relevant analytic tools from probability and statistics and also important managerial and organizational concepts. Extensive use is made of case studies and examples from industry and government.

0101	Nidak Sumrean M 7:00pm - 9:40pm	Seats (Total: 14) JMP 2222
DE01	Nidak Sumrean Class time/details on ELMs	Seats (Total: 8) ONLINE

SG01	Nidak Sumrean	Seats (Total: 3)
	M 7:00pm - 9:40pm	Location: TBA
SM01	Nidak Sumrean	Seats (Total: 3)
	M 7:00pm - 9:40pm	Location: TBA

ENSE698E Special Topics in Systems Engineering; Sensor Systems

Credits: 3 Grading Method: Regular,
Audit

Cross-listed with ENCE688D. Credit only granted for ENCE688D or ENSE698E .

0101	David Lovell, Pamela Abshire	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	EGR 3102

ENSE699 Directed Study in Systems Engineering

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Directed study in Systems Engineering.

Contact department for information to register for this course.

ENSE799 Systems Engineering Thesis; Masters Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular

The application of systems engineering concepts, principles, and theories will be applied to the Master's Thesis project. Project/thesis work will be defined and selected early in student's program and supervised by a university faculty mentor.

Contact department for information to register for this course.

ENSP Environmental Science and Policy Fall 2019

ENSP101 Introduction to Environmental Science

Credits: 3 Grading Method: Regular CORE: PS General Education: DSNS

One of two required courses that introduce students to the topics studied and methods employed in environmental science and policy. Emphasis on scientific ways of knowing; the systems, cycles, flows, and interfaces that characterize the atmosphere, lithosphere, hydrosphere, and biosphere; the analysis of human impacts on these systems; and the nature of scientific uncertainty and methods of quantifying environmental processes.

0101	Annette Spivy TuTh 11:00am - 12:15pm Th 2:00pm - 2:50pm	Seats (Total: 25) JMZ 0220 MTH 0104	Discussion
0102	Annette Spivy TuTh 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 24) JMZ 0220 PLS 1146	Discussion
0103	Annette Spivy TuTh 11:00am - 12:15pm F 1:00pm - 1:50pm	Seats (Total: 24) JMZ 0220 SYM 0215	Discussion
0104	Annette Spivy TuTh 11:00am - 12:15pm F 1:00pm - 1:50pm	Seats (Total: 24) JMZ 0220 PLS 1184	Discussion
0105	Annette Spivy TuTh 11:00am - 12:15pm Th 2:00pm - 2:50pm	Seats (Total: 25) JMZ 0220 EGR 1102	Discussion
0106	Annette Spivy TuTh 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 24) JMZ 0220 EGR 3106	Discussion
0107	Annette Spivy TuTh 11:00am - 12:15pm F 10:00am - 10:50am	Seats (Total: 24) JMZ 0220 PLS 1115	Discussion
FC01	Annette Spivy TuTh 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 30) CHM 1224	

ENSP330

(Perm req)

Introduction to Environmental Law

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Recommended: ENSP101 and ENSP102. Restriction: Junior standing or higher. And must be a major in the Environmental Science and Policy program; or permission of Environmental Science and Policy program.

An overview of environmental law, from its common law roots to its role in the modern regulatory state, including an examination of major federal environment statutes and the policy debates inherent in them. Other areas covered include civil and criminal enforcement, standing to sue, land use control, and regulatory takings.

0101	Joanna Goger	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	CHM 1228

ENSP340

Water: Science, Ethics, and Policy

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Recommended: ENSP101 and ENSP102. Restriction: Must have earned a minimum of 60 credits. And must be a major in the Environmental Science and Policy program; or permission of Environmental Science and Policy program.

Exploration of the science, policy, and ethical aspects of water resource protection and management. Focus on water pollution, water availability, ecosystems, and sustainability

0101	Caroline Boules	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	SYM 0215

ENSP386

Internship

(Perm req)

Credits: 3-6 Grading Method: Regular

Restriction: Must have internship proposal approved by the concentration advisor, the director of ENSP and the student's internship sponsor.

Contact department for information to register for this course.

ENSP399

Special Topics in Environmental Science and Policy

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

A substantive and specialized examination of contemporary issues in environmental science or policy.

Contact department for information to register for this course.

ENSP399R

Special Topics in Environmental Science and Policy; Research

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

A substantive and specialized examination of contemporary issues in environmental science or policy.

0601	Annette Spivy	Seats (Total: 10)
	Contact instructor or department for details.	
1001	Jennifer Mullinax	Seats (Total: 10)
	Contact instructor or department for details.	

ENSP400

Capstone in Environmental Science and Policy

(Perm req)

Credits: 3

Grading Method: Regular

CORE: CS

General Education: DSSP

Prerequisite: ENSP101; and ENSP102. Restriction: Must be in Environmental Science and Policy program; and senior standing; and permission of the Environmental Science and Policy Program.

Integration of physical, biological, and social sciences with applications to environmental science and policy. Problem-solving and multi-disciplinary case study evaluations pertinent to contemporary and future issues related to the environment.

0101	Mark Carroll	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	AJC 2134
0102	Joanna Goger	Seats (Total: 35)
	TuTh 12:30pm - 1:45pm	ITV 1111

ENSP499

Honors Thesis Research

Credits: 1-6

Grading Method: Regular

Individual research, thesis, and oral defense. The research project will be conducted under the supervision of a faculty member.

Contact department for information to register for this course.

ENST

Environmental Science and Technology

Fall 2019

ENST200

Fundamentals of Soil Science

Credits: 4

Grading Method: Regular,
Pass-Fail, Audit

CORE: LL

General Education: DSNL

Corequisite: CHEM131 and CHEM132; or permission of AGNR-Environmental Science & Technology department. Credit only granted for: ENST200 or NRSC200. Formerly: NRSC200.

Study and management of soils as natural bodies, media for plant growth, and ecosystem components. Morphology, composition, formation, and conservation of soils. Chemical, biological, and physical properties are discussed in relation to the production of plants, the functioning of hydrologic and nutrient cycles, the protection of environmental quality, and engineering uses of soils.

0101	Raymond Weil TuTh 3:30pm - 4:45pm Tu 5:00pm - 7:50pm	Seats (Total: 20) HJP 0226 HJP 0210	Lab
0102	Raymond Weil TuTh 3:30pm - 4:45pm W 5:00pm - 7:50pm	Seats (Total: 20) HJP 0226 HJP 0210	Lab
0103	Raymond Weil TuTh 3:30pm - 4:45pm Th 5:00pm - 7:50pm	Seats (Total: 20) HJP 0226 HJP 0210	Lab
0104	Raymond Weil TuTh 3:30pm - 4:45pm Tu 9:30am - 12:20pm	Seats (Total: 20) HJP 0226 HJP 0210	Lab
0105	Raymond Weil TuTh 3:30pm - 4:45pm W 9:00am - 11:50am	Seats (Total: 20) HJP 0226 HJP 0210	Lab

ENST233

Introduction to Environmental Health

Credits: 4

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSNS

Examines how humans are affected by the quality of our air, water, soil and food supply as well as how human activities alter these survival necessities. Students will learn how the evolution and prosperity of human populations have resulted in degradation of our environment and the impact of environmental degradation on the health of people. The implications of individual and collective choices for sustainable food production, population management, and resource utilization will be explored.

0101	Lance Yonkos TuTh 9:30am - 10:45am M 3:00pm - 3:50pm	Seats (Total: 24) ANS 0408 ANS 0422	Discussion
0102	Lance Yonkos TuTh 9:30am - 10:45am W 3:00pm - 3:50pm	Seats (Total: 24) ANS 0408 ANS 0422	Discussion
0103	Lance Yonkos TuTh 9:30am - 10:45am M 4:00pm - 4:50pm	Seats (Total: 24) ANS 0408 ANS 0422	Discussion

0104	Lance Yonkos	Seats (Total: 24)	
	TuTh 9:30am - 10:45am	ANS 0408	
	W 4:00pm - 4:50pm	ANS 0422	Discussion

ENST281 Computer Aided Design in Ecology

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in Environmental Sci & Tech program.

Basics of Computer Aided Drawing (CAD) applied to design of constructed ecosystems. Use of campus stormwater wetland as case study.

0101	Jose-Luis Izursa	Seats (Total: 20)	
	M 2:00pm - 2:50pm	ANS 0422	
	M 3:00pm - 5:00pm	ANS 0509	Lab
0102	Jose-Luis Izursa	Seats (Total: 20)	
	M 2:00pm - 2:50pm	ANS 0422	
	W 3:00pm - 5:00pm	ANS 0509	Lab

ENST301 Field Soil Morphology I

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of AGNR-Environmental Science & Technology department. Formerly: ENST308.

This is a field-oriented course that introduces students to the techniques used to (1) describe soil morphology, and site and profile characteristics, (2) make land use interpretations based on soil characteristics, and (3) classify soils. This class is designed to prepare students for the Regional Collegiate Soil Judging Contest and for students to gain experience in the description and interpretation of soils in the field.

0101	Brian Needelman	Seats (Total: 7)	
	Contact instructor or department for details.		

ENST302 Field Soil Morphology II

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENST301. Restriction: Permission of AGNR-Environmental Science & Technology department. Formerly: ENST308.

This is the second field-oriented course in a three course sequence that provides intermediate training for students in the techniques used to (1) describe soil morphology, and site and profile characteristics, (2) make land use interpretations based on soil characteristics, and (3) classify soils. This class is designed to prepare students for the Regional Collegiate Soil Judging Contest and for students to gain experience in the description and interpretation of soils in the field.

0101	Brian Needelman	Seats (Total: 7)
Contact instructor or department for details.		

ENST303 Field Soil Morphology III

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENST302. Restriction: Permission of AGNR-Environmental Science & Technology department. Formerly: ENST308.

This is the third field-oriented course in a three course sequence that provides intermediate training for students in the techniques used to (1) describe soil morphology, and site and profile characteristics, (2) make land use interpretations based on soil characteristics, and (3) classify soils. This class is designed to prepare students for the Regional Collegiate Soil Judging Contest and for students to gain experience in the description and interpretation of soils in the field.

0101	Brian Needelman	Seats (Total: 15)
Contact instructor or department for details.		

ENST333 Ecosystem Health and Protection

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENST233. Restriction: Must be in one of the following programs (Environmental Sci & Tech: Ecological Tech Design; Environmental Sci & Tech: Environmental Health; Environmental Sci & Tech: Soil & Watershed Science; Environmental Sci & Tech: Natural Resources Mgmt; Environmental Sci & Tech). Credit only granted for: ENST499A or ENST333. Formerly: ENST499A.

Discussion of the philosophies, principles, and practices for assessing ecosystem health with emphasis on an ecosystem perspective rather than a human health perspective. Degradation associated with human activities will be emphasized. Topics will range from local to regional to global issues, including a discussion on global warming and its possible impacts on ecosystems. Concepts will be clarified using case histories from the Chesapeake Bay watershed.

0101	Jennifer Gunnulfsen	Seats (Total: 45)
	TuTh 11:00am - 12:15pm	ANS 0422

ENST360 Ecosystem Ecology

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BSCI160 and BSCI161; or BSCI106. Restriction: Must be in one of the following programs (Environmental Sci & Tech: Ecological Tech Design; Environmental Sci & Tech: Environmental Health; Environmental Sci & Tech: Soil & Watershed Science; Environmental Sci & Tech: Natural Resources Mgmt; Environmental Sci & Tech).

The study of ecology has a long and interesting history, from early society's efforts to understand and alter their environment as a matter of survival to the challenges the modern world is facing that are global in scale. Through the course text, distributed supplemental chapter readings and an understanding of the scientific literature, this course will cover the essential concepts and principles of ecosystem ecology as well as its history and past and present controversies. Several of the basic methods and tools of field research and the applied management of ecosystems will be discussed and demonstrated with several field excursions in the natural environs of the DC area. Central to this course will be the understanding that modern human society is an integral part of nature, with the power to impact and influence elements of the natural world at multiple scales. An analysis of policy implications for the biosphere will be discussed.

The study of ecology has a long and interesting history, from early society's efforts to understand and alter their environment as a matter of survival to the challenges the modern world is facing that are global in scale. Through the course text, distributed supplemental chapter readings and an understanding of the scientific literature, this course will cover the essential concepts and principles of ecosystem ecology as well as its history and past and present controversies. Several of the basic methods and tools of field research and the applied management of ecosystems will be discussed and demonstrated with several field excursions in the natural environs of the DC area. Central to this course will be the understanding that modern human society is an integral part of nature, with the power to impact and influence elements of the natural world at multiple scales. An analysis of policy implications for the biosphere will be discussed.

0101	Peter May	Seats (Total: 35)	
	MWF 10:00am - 10:50am	ESJ 2212	
	M 1:00pm - 1:50pm	ANS 0402	Discussion
0102	Peter May	Seats (Total: 35)	
	MWF 10:00am - 10:50am	ESJ 2212	
	W 1:00pm - 1:50pm	EGR 1104	Discussion

ENST388

Honors Thesis Research

Credits: 3-6 Grading Method: Regular,
Pass-Fail, Audit

Undergraduate honors thesis research conducted under the direction of an AGNR faculty member in partial fulfillment of the requirements of the College of AGNR Honors Program. The thesis will be defended to a faculty committee.

2201	Martin Rabenhorst	Seats (Total: 1)
	Contact instructor or department for details.	
2905	Stephanie Yarwood	Seats (Total: 1)
	Contact instructor or department for details.	

ENST389 Internship

(Perm req)

Credits: 3 Grading Method: Sat-Fail

Credit will be granted for practical work carried out by students placed in work environment related to their stated career goals. Students must do an in-depth study in some portion of the work experience and produce a special project or report related to this study. A student work log is also recommended. An evaluation from the external supervisor of the project will be required. Credit arranged with supervising faculty member.

0101	Jose-Luis Izursa	Seats (Total: 50)
	Contact instructor or department for details.	

ENST403 Invasive Species Ecology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: ENST403, ENST603, or ENST689R.

We will examine ecological, evolutionary, and anthropogenic processes facilitating or resisting biological invasions, and consider their environmental, economic, and human health impacts. We will consider various management strategies to mitigate invasions and identify areas of future research. Field trips and detailed discussion of recent findings and controversies in the literature will help illustrate fundamental concepts of invasions among various ecosystems.

0101	Paul Leisnham	Seats (Total: 20)
	MWF 10:00am - 10:50am	ANS 1422

ENST411 Principles of Soil Fertility

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENST200; or students who have taken courses with comparable content may contact the department. Jointly offered with ENS T611. Credit only granted for: ENST411 or NRSC411. Formerly: NRS C411.

Soil factors affecting plant growth and quality with emphasis on the bio-availability of mineral nutrients. The management of soil systems to enhance plant growth by means of crop rotations, microbial activities, and use of organic and inorganic amendments.

0101	Raymond Weil	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ANS 1422

ENST414 Soil Morphology, Genesis and Classification

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENST200. Credit only granted for: ENST414 or NRSC414. Formerly: NRSC414.

Processes and factors of soil genesis. Taxonomy of soils of the world by U.S. System. Soil morphological characteristics, composition, classification, survey and field trips to examine and describe soils.

0101	Brian Needelman	Seats (Total: 20)
	MWF 10:00am - 10:50am	ATL 2416
	M 3:00pm - 6:00pm	HJP 0210 Lab

ENST415 Renewable Energy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHEM131, PHYS121, and MATH113; or permission of AGNR-Environmental Science & Technology department. Restriction: Must be in a major within AGNR-Environmental Science & Technology department.

An overview of renewable energy technologies and their current applications. Emphasis will be placed on technological readiness, efficiency and sustainability of renewable energy alternatives. Technologies include solar thermal, photovoltaics, biodiesel, ethanol, anaerobic digestion, wind, hydroelectric, and microbial fuel cells.

0101	Stephanie Lansing	Seats (Total: 40)
	MWF 11:00am - 11:50am	ANS 0422

ENST417 Soil Hydrology and Physics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENST200; and (MATH113 or MATH115). Or permission of instructor. Credit only granted for: ENST417 or NRSC417. Formerly: NRSC417.

A study of soil water interactions: the hydrologic cycle; the unique properties of water and soil; the soil components and their interactions; the field water cycle; transport processes involving water, heat and solutes; human effects on soil and groundwater; as well as the measurement, prediction, and control of the physical processes taking place in and through the soil.

0101	Robert Hill	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	JMP 1202

ENST432 Environmental Microbiology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHEM131 and CHEM132. And BSCI170 and BSCI171; or BSCI105. Credit only granted for: ENST432 or ENST499M. Formerly: ENST499M.

Microorganisms are everywhere and mediate many of the processes that we observe everyday. These organisms are the unseen catalysts for numerous industrial processes and are critical to many emerging technologies and novel products. Environmental microbiologists ask: How do microorganisms in the environment benefit society? This course will answer this question by examining microbes in bioremediation, food safety, climate change, and biotechnology.

0101	Stephanie Yarwood	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	SYM 0215

ENST434 Toxic Contaminants: Sources, Fate, and Effects

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENST333 and ENST334.

Study of the release to the environment, transport through natural compartments, persistence and ultimate fate of various classes of contaminants produced as a result of human activities. Topics will culminate in discussions of impacts to wildlife and human health. Students should emerge with a practical appreciation of the actual risks from exposure to a variety of environmental contaminants and an understanding of the environmental and human health implications of continuing the contaminating activities.

0101	Lance Yonkos	Seats (Total: 25)
	TuTh 5:00pm - 6:15pm	ANS 0422

ENST450 Wetland Ecology

Credits: 3 Grading Method: Regular

Prerequisite: BIOM301; or permission of AGNR-Environmental Science & Technology department. Jointly offered with ENST650. Credit only granted for: ENST450 or MEES650.

Plant and animal communities, biogeochemistry, and ecosystem properties of wetlands. Lectures are supplemented by weekend or Friday field trips (1-3 days total during the semester) and in-class labs that emphasize collection and analysis of field data on wetland vegetation, soil, and hydrology. Wading boots (at least hip length) are strongly recommended.

0101	Andrew Baldwin	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ANS 0422

ENST460 Principles of Wildlife Management

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed two semesters of biology laboratory; and (ENST360; or BSCI361). Or permission of AGNR-Environmental Science & Technology department.

Ecological principles and requirements of wildlife as basis for management, and introduction to the scientific literature. Conflicts in wildlife management, government administration of wildlife resources, legislation, and history of the wildlife management profession.

0101	Jennifer Mullinax	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	ANS 0412

ENST461 Urban Wildlife Management

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Ecology and management of wildlife in urban areas. For students in biological sciences, geography, landscape design, natural resources management, recreation and urban studies. Planning, design, and wildlife conservation in landscape ecology. Public attitudes, preferences, and values, review of private conservation organizations.

0101	Annette Spivy	Seats (Total: 40)
	TuTh 9:30am - 10:45am	ANS 0412

ENST472 Capstone II

(Perm req)

Credits: 3 Grading Method: Regular, CORE: CS General Education: DSSP
Pass-Fail, Audit

Prerequisite: ENST471. Restriction: Must be in a major within AGNR-Environmental Science & Technology department; and permission of AGNR-Environmental Science & Technology department.

This course is the second in a two-part series. Students will continue work on projects proposed and begun in ENST471. Focus on professional project preparation, presentation, critical evaluation on environmental science research, professional development, and career planning. Students will develop and present original projects and critique projects presented by others.

1201	Andrew Baldwin	Seats (Total: 10)
	Contact instructor or department for details.	
1205	William Bowerman	Seats (Total: 10)
	Contact instructor or department for details.	
1501	Gary Felton	Seats (Total: 10)
	Contact instructor or department for details.	
1508	Reginal Harrell	Seats (Total: 10)
	Contact instructor or department for details.	
1601	Robert Hill	Seats (Total: 10)
	Contact instructor or department for details.	
1801	Patrick Kangas	Seats (Total: 10)
	Contact instructor or department for details.	
1802	Stephanie Lansing	Seats (Total: 10)
	Contact instructor or department for details.	
1803	Paul Leisnham	Seats (Total: 10)
	Contact instructor or department for details.	
2005	Jennifer Mullinax	Seats (Total: 10)
	Contact instructor or department for details.	
2101	Brian Needelman	Seats (Total: 10)
	Contact instructor or department for details.	
2102	Masoud Negahban-Azar	Seats (Total: 10)
	Contact instructor or department for details.	
2103	Mitchell Pavao-Zuckerman	Seats (Total: 10)
	Contact instructor or department for details.	
2104	Shannon Browne	Seats (Total: 10)
	Contact instructor or department for details.	

2105	Wendy Peer	Seats (Total: 10)
	Contact instructor or department for details.	
2201	Martin Rabenhorst	Seats (Total: 10)
	Contact instructor or department for details.	
2601	David Tilley	Seats (Total: 10)
	Contact instructor or department for details.	
2701	Raymond Weil	Seats (Total: 10)
	Contact instructor or department for details.	
2804	Jose-Luis Izursa	Seats (Total: 10)
	Contact instructor or department for details.	
2805	Gurpal Toor	Seats (Total: 10)
	Contact instructor or department for details.	
2905	Stephanie Yarwood	Seats (Total: 10)
	Contact instructor or department for details.	
3001	Lance Yonkos	Seats (Total: 10)
	Contact instructor or department for details.	

ENST485

Water Management in Urban Environment

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH120, MATH130, MATH136, or MATH140. Credit only granted for: ENST485 OR ENST489Z. Formerly: ENST489Z.

Historically, with the exception of certain locations, water has been available in sufficient quantities, and providing supporting infrastructure has been relatively straightforward. In urban areas, the concentration of people and the drastic changes in land use, have altered the fluxes of water, sediments, chemicals, and microorganisms. As the population increases and the number of large urban areas keeps growing (both in U.S. and internationally), managing water in urban areas is becoming more challenging. Water must be supplied for domestic, commercial, and industrial use, as well as irrigation and maintaining and enhancing local environments (e.g., urban streams). In addition, stormwater must be managed to prevent flooding and environmental damage, and used water, which contains organic matter, nutrients, and other constituents that can be extracted and reused, must be collected and managed. In this course we take a systems approach to urban water hydrology, engineering, planning and management. We will explore urban water cycle, urban runoff and drainage characteristics, urban water supply and demand, stormwater collection and treatment and designing best management practices. Additionally, we look at the climate impacts on the urban water cycle.

0101	Masoud Negahban-Azar	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	ANS 0422

ENST486 SENIOR PROFESSIONAL INTERNSHIP

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENST389. Restriction: Permission of AGNR-Environmental Science & Technology department.

Experiential learning is a key component in Environmental Science and Technology education. Through the senior professional internship program, you will have the opportunity to develop your expertise in a specific area or discipline within your ENST concentration curriculum. You will arrange an off-campus internship experience related to Environmental Science and Technology. You will spend a specified number of hours at their internship site each week and attend biweekly classroom sessions where we will discuss how the study environmental science and technology fits into your specific internship experience as well as understand how to achieve each of the course learning outcomes.

0101	Jose-Luis Izursa	Seats (Total: 40)
	F 10:00am - 2:30pm	CSI 2107

ENST487 Environmental Conflicts and Decision Making

Credits: 2 Grading Method: Regular

Restriction: Senior standing. And must be in one of the following programs (Environmental Sci & Tech: Natural Resources Mgmt; Environmental Sci&Pol-Wildlife Ecology & Mgmt) ; or permission of AGNR-Environmental Science & Technology department.

Study major cases which focus on environmental science with concentration on the role and techniques of negotiation, collaborative decision making, and adaptive resource management as an environmental conflict resolution process.

0101	Jennifer Mullinax	Seats (Total: 20)
	W 10:00am - 11:50am	CHE 2136

ENST489 Research Experience

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An advanced research-based course in the field of environmental science and technology.

Contact department for information to register for this course.

ENST499**Special Topics in Environmental Science and Technology**

(Perm req)

Credits: 1-4 Grading Method: Regular,
Pass-Fail, Audit

An independent study, and/or lecture, and/or laboratory series organized to study a selected phase of Environmental Science and Technology not covered by existing courses. Credit arranged with supervising faculty member.

Contact department for information to register for this course.

ENST499L**Special Topics in Environmental Science and Technology; Ground Water Use in the Developing World**

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

An independent study, and/or lecture, and/or laboratory series organized to study a selected phase of Environmental Science and Technology not covered by existing courses. Credit arranged with supervising faculty member.

Overview of ground water as a water resource, its availability, quality and extraction in various developing countries. The role of a consultant in adapting modern technologies to developing ground water as a viable water resource.

0101	Yaron Sternberg	Seats (Total: 40)
	M 12:00pm - 12:50pm	ANS 0422

ENST499X**Special Topics in Environmental Science and Technology; Soil Science**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An independent study, and/or lecture, and/or laboratory series organized to study a selected phase of Environmental Science and Technology not covered by existing courses. Credit arranged with supervising faculty member.

Contact department for information to register for this course.

0101	Raymond Weil	Seats (Total: 5)
	Contact instructor or department for details.	

ENST499Y**Special Topics in Environmental Science and Technology; College Teaching**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An independent study, and/or lecture, and/or laboratory series organized to study a selected phase of Environmental Science and Technology not covered by existing courses. Credit arranged with supervising faculty member.

0101	Raymond Weil	Seats (Total: 2)
	Contact instructor or department for details.	
1508	Reginal Harrell	Seats (Total: 2)
	Contact instructor or department for details.	
2104	Shannon Browne	Seats (Total: 2)
	Contact instructor or department for details.	
2804	Jose-Luis Izursa	Seats (Total: 2)
	Contact instructor or department for details.	
3201	Peter May	Seats (Total: 2)
	Contact instructor or department for details.	

ENST602 Research Principles and Methodology in Environmental Science and Technology

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in Environmental Sci & Tech program.

Fundamental research strategies and methods of investigation in Environmental Science and Technology including field and laboratory procedures.

0101	Jennifer Mullinax	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	ANS 1422

ENST603 Advanced Invasive Species Ecology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Jointly offered with ENST403. Credit only granted for: ENST403, ENST603 , or ENST689R. Formerly: ENST689R. Additional information: Two field trips are planned for this class.

We will examine ecological, evolutionary, and anthropogenic processes facilitating or resisting biological invasions, and consider their environmental, economic, and human health impacts. We will consider various management strategies to mitigate invasions and identify areas of future research. Field trips and detailed discussion of recent findings and controversies in the literature will help illustrate fundamental concepts of invasions among various ecosystems.

0101	Paul Leisnham	Seats (Total: 10)	
	MWF 10:00am - 10:50am	ANS 1422	
	F 11:00am - 11:50am	ANS 1422	Discussion

ENST608 Research Methods

(Perm req)

Credits: 1-4 Grading Method: Regular,
Audit

Development of research viewpoint by detailed study and report on crop and soil research of the Maryland Agriculture Experiment Station or review and discussion of literature on specific agricultural problems or new research techniques.

Contact department for information to register for this course.

ENST611 Advanced Principles of Soil Fertility

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENST200; or students who have taken courses with comparable content may contact the department. Jointly offered with ENS T411. Credit only granted for: ENST411, NRSC411, or ENST611.

Soil factors affecting plant growth and quality with emphasis on the bio-availability of mineral nutrients. The management of soil systems to enhance plant growth by means of crop rotations, microbial activities, and use of organic and inorganic amendments.

0101	Raymond Weil	Seats (Total: 10)	
	TuTh 12:30pm - 1:45pm	ANS 1422	

ENST650 Advanced Wetland Ecology

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: BIOM301; or permission of AGNR-Environmental Science & Technology department; or permission of CMNS-Marine & Estuarine-Environmental Science Prog. Jointly offered with ENST450, MEES650. Credit only granted for: ENST450, ENST650, or MEES650. Additional information: Wading boots (at least hip length) are strongly recommended.

Plant and animal communities, biogeochemistry, and ecosystem properties of wetland systems. In-class laboratory will emphasize collection and analysis of field data on wetland vegetation, soil, and hydrology.

Course requires two Saturday field trips.

0101	Andrew Baldwin	Seats (Total: 10)
	TuTh 2:00pm - 3:15pm	ANS 0422

ENST689

Special Topics

Credits: 1-3

Grading Method: Regular,
Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on a specialized advanced topic.

1201	Andrew Baldwin	Seats (Total: 5)
	Contact instructor or department for details.	
1205	William Bowerman	Seats (Total: 5)
	Contact instructor or department for details.	
1401	Frank Coale	Seats (Total: 5)
	Contact instructor or department for details.	
1501	Gary Felton	Seats (Total: 5)
	Contact instructor or department for details.	
1508	Reginal Harrell	Seats (Total: 5)
	Contact instructor or department for details.	
1601	Robert Hill	Seats (Total: 5)
	Contact instructor or department for details.	
1801	Patrick Kangas	Seats (Total: 5)
	Contact instructor or department for details.	
1802	Stephanie Lansing	Seats (Total: 5)
	Contact instructor or department for details.	
1803	Paul Leisnham	Seats (Total: 5)
	Contact instructor or department for details.	
1805	Michael Kearney	Seats (Total: 5)
	Contact instructor or department for details.	
2001	Bahram Momen	Seats (Total: 5)
	Contact instructor or department for details.	

2005	Jennifer Mullinax	Seats (Total: 5)
	Contact instructor or department for details.	
2101	Brian Needelman	Seats (Total: 5)
	Contact instructor or department for details.	
2102	Masoud Negahban-Azar	Seats (Total: 5)
	Contact instructor or department for details.	
2103	Mitchell Pavao-Zuckerman	Seats (Total: 5)
	Contact instructor or department for details.	
2105	Wendy Peer	Seats (Total: 5)
	Contact instructor or department for details.	
2201	Martin Rabenhorst	Seats (Total: 3)
	Contact instructor or department for details.	
2601	David Tilley	Seats (Total: 5)
	Contact instructor or department for details.	
2701	Raymond Weil	Seats (Total: 5)
	Contact instructor or department for details.	
2805	Gurpal Toor	Seats (Total: 5)
	Contact instructor or department for details.	
2905	Stephanie Yarwood	Seats (Total: 5)
	Contact instructor or department for details.	
3001	Lance Yonkos	Seats (Total: 2)
	Contact instructor or department for details.	

ENST689C

Special Topics; Adaptation and Resilience in Urban Social-Ecological Systems

Credits: 1-3 Grading Method: Regular,
Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on a specialized advanced topic.

0101	Mitchell Pavao-Zuckerman	Seats (Total: 10)
	M 1:00pm - 3:50pm	ANS 1422

ENST689E Special Topics; Advanced Ecosystem Health and Natural Resource Management

Credits: 3 Grading Method: Regular

Credit according to time scheduled and organization of the course. Organized as a lecture series on a specialized advanced topic.

0101	Paul Leisnham	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ANS 1420

ENST6890 Special Topics; Advances in Research, Invasive Plants

Credits: 1 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on a specialized advanced topic.

0101	Wendy Peer	Seats (Total: 20)
	M 4:00pm - 4:50pm	ANS 1422

ENST689X Special Topics; Methods in University Teaching

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on a specialized advanced topic.

0101	Raymond Weil	Seats (Total: 1)
	Contact instructor or department for details.	

ENST689Y Special Topics; Advances in Research, Plant Membrane Biology

Credits: 2 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on a specialized advanced topic.

0101	Angus Murphy, Wendy Peer	Seats (Total: 10)
	Contact instructor or department for details.	

ENST689Z Special Topics; Introductory University Instruction

Credits: 1-3 Grading Method: Regular,
Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on a specialized advanced topic.

2905	Stephanie Yarwood	Seats (Total: 1)
Contact instructor or department for details.		

ENST761 Methods in Pedological Investigations

Credits: 4 Grading Method: Regular, Audit

Prerequisite: ENST414; or permission of AGNR-Environmental Science & Technology department.

This is designed to equip students with analytical tools for soil microfabric and mineralogical analysis in order to understand soil properties and processes. A number of techniques will be discussed, but emphasis will be placed on micromorphology and x-ray diffractometry. Both theoretical and applied considerations will be covered, and students will gain substantial hands on experience in collecting and interpreting data germane to their research interests.

This is designed to equip students with analytical tools for soil microfabric and mineralogical analysis in order to understand soil properties and processes. A number of techniques will be discussed, but emphasis will be placed on micromorphology and x-ray diffractometry. Both theoretical and applied considerations will be covered, and students will gain substantial hands on experience in collecting and interpreting data germane to their research interests.

0101	Martin Rabenhorst	Seats (Total: 10)	
	MW 8:00am - 8:50am	ANS 0422	
	MW 9:00am - 12:00pm	Location: TBA	Lab

ENST789 Advances in Research

Credits: 1-4 Grading Method: Regular, Audit

A study of recent advances in agronomy research.

Contact department for information to register for this course.

ENST798 Graduate Seminar

Credits: 1 Grading Method: Regular, Audit

Designed to provide a venue for interactive discussion between ENST graduate students and other members of the ENST community regarding thesis/dissertation research planned or conducted as part of the students graduate program.

0101	Stephanie Yarwood, Martin Rabenhorst	Seats (Total: 40)
	W 12:00pm - 12:50pm	ANS 0408

ENST799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

ENST898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

ENST899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

ENTM Entomology Fall 2019

ENTM699K Advanced Entomology; Biological Sciences Teaching and Learning in Higher Education

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Credit and prerequisites to be determined by the department. First and second semesters. Studies of minor problems in morphology, physiology, taxonomy and applied entomology, with particular reference to the preparation of the student for individual research.

Cross-listed with BIOL608K, CBMG699K, and CHEM608K. Credit will be granted for only one of the following: BIOL608K, CBMG699K, CHEM608K, or ENTM699K.

0101	Gili Ad-Marbach	Seats (Total: 12)
	W 11:00am - 12:40pm	BPS 1208

ENTM699W Advanced Entomology; Insect Physiology and Molecular Biology

Credits: 3 Grading Method: Regular, Audit

Credit and prerequisites to be determined by the department. First and second semesters. Studies of minor problems in morphology, physiology, taxonomy and applied entomology, with particular reference to the preparation of the student for individual research.

0101	Jian Wang	Seats (Total: 20)
	Contact instructor or department for details.	

ENTM701 Effective Teaching: TA Training

(Perm req)

Credits: 1 Grading Method: Regular

Cross-listed with BISI701. Credit only granted for: ENTM701, BISI688Z, CBMG688Z, or BIOL701.

A survey and discussion of topics pertinent to graduate students who are first-time teaching assistants, including teaching responsibilities and policies, effective techniques of lecturing and leading discussions, composing and grading quizzes and exams, cultural diversity, time management, and development of a teaching portfolio. All teaching assistants in the College of Life Sciences must take a 701 TA training course in one of the departments.

0101	Bretton Kent	Seats (Total: 20)
	Tu 6:00pm - 8:00pm	BPS 1208

ENTM710 Insect Biodiversity, Physiology and Ecology

Credits: 3 Grading Method: Regular

A survey course discussing the various families of insects, discuss their anatomy and physiology, and their role in ecological systems. Students will examine the ecological and evolutionary perspectives on interactions between plants and vertebrate and invertebrate animals. Further, it explores the applied consequences of animal-plant interactions to agroecology and conservation biology. These goals are achieved by reviewing the theoretical underpinnings of animal-plant interactions, and exposing students to research literature on animal-plant interactions.

Restricted to Applied Entomology students. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.

[Click here for program information.](#)

PLE1	Marcia Shofner	Seats (Total: 8)
	Meets August 26, 2019 - November 15, 2019	
	Class time/details on ELMs	ONLINE

ENTM745 Bee Biology and Beekeeping

Credits: 3 Grading Method: Regular

Students will be introduced to the anatomy and physiology of the honey bee colony with emphasis on how to use this information to best manage honey bee colonies.

Restricted to Applied Entomology students. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.

Click here for program information.

PLE1	Dennis vanEngelsdorp, Anthony Nearman, Kelly Kulhanek	Seats (Total: 8)
	Meets August 26, 2019 - November 15, 2019	
	Class time/details on ELMs	ONLINE

ENTM756 Insect Diseases and Pathology

Credits: 3 Grading Method: Regular

Credit only granted for: ENTM715 or ENTM756. Formerly: ENTM715.

Integrates aspects of biochemistry, molecular biology and evolution theory with ecology using pathogens of insects as a model. The various biotic (living) and abiotic (nonliving) factors that can contribute to plant problems. Explores the direction and goals of innovation in microbial biocontrol as well as the effect of social criticism and considerations of environmental impact on attempts to introduce engineered microorganisms.

Restricted to Applied Entomology students. For permission to enroll, must be admitted into a term-based calendar graduate program. Contact oes@umd.edu.

Click here for program information.

PLE1	Raymond StLeger	Seats (Total: 8)
	Meets August 26, 2019 - November 15, 2019	
	Class time/details on ELMs	ONLINE

ENTM769 Capstone: Scholarly Paper

Credits: 3 Grading Method: Regular

An examination of the current literature on topics related to the field of applied entomology. The Capstone Course provides the opportunity to apply and integrate best practices based on current research in the form of a formal scholarly paper.

Contact department for information to register for this course.

ENTM788C Entomological Topics; Colloquium

Credits: 1-3 Grading Method: Regular,
Audit

One lecture or one two-hour laboratory period a week for each credit hour. Lectures, group discussions or laboratory sessions on selected topics such as: aquatic insects, biological control of insects, entomological literature, forest entomology, history of entomology, insect biochemistry, insect embryology, immature insects, insect behavior, insect communication, principles of entomological research.

0101	Anahi Espindola	Seats (Total: 45)	
	F 12:00pm - 12:50pm	PLS 1130	
	F 1:00pm - 1:50pm	PLS 1130	Discussion

ENTM798J Topic Seminar; Taxonomy of Non-Insect Terrestrial Anthropods

Credits: 1 Grading Method: Regular,
 Audit

Discussion and presentation of current research and literature.

0101	Jeffrey Shultz	Seats (Total: 20)	
	Contact instructor or department for details.		

ENTM798N Topic Seminar; Adventures in Extension

Credits: 1 Grading Method: Regular,
 Audit

Discussion and presentation of current research and literature.

0101	Michael Raupp	Seats (Total: 20)	
	Contact instructor or department for details.		

ENTM799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular
Contact department for information to register for this course.

ENTM898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular
Contact department for information to register for this course.

ENTM899 Doctoral Dissertation Research

(Perm req) Credits: 6 Grading Method: Regular
Contact department for information to register for this course.

ENTS622

Introduction to Digital Communication Systems

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in Telecommunications (Master's) program; or permission of ENGR-Electrical & Computer Engineering department. Credit only granted for: ENTS622 or ENTS689B. Formerly: ENTS689B.

Principles of analog and digital communication systems design. Analysis of the performance and relative merits of different modulation and demodulation, signal processing, filtering and error control schemes in communication systems. Also provides an understanding of the design of modern digital communication systems.

0101	Alejandra Mercado	Seats (Total: 16)
	M 5:30pm - 8:15pm	ITV 1100
	F 5:30pm - 8:15pm	AVW 1362 Lab
0102	Alejandra Mercado	Seats (Total: 16)
	M 5:30pm - 8:15pm	ITV 1100
	Tu 9:00am - 11:45am	AVW 1362 Lab
0103	Alejandra Mercado	Seats (Total: 16)
	M 5:30pm - 8:15pm	ITV 1100
	Th 2:00pm - 4:45pm	AVW 1362 Lab

ENTS625

Management and Organizational Behavior in the Telecommunications Industry

Credits: 3 Grading Method: Regular,
Audit

Roles of the general manager in: determining target markets and designing strategies for them; formulating and implementing corporate and business level strategies; and staffing, developing, and managing human resources and coordinating them with the organization's financial and physical resources. Also emphasizes the building of interpersonal skills with respect to the selection of members for work teams and team formation, leadership of teams toward the achievement of strategic goals and total quality, the development and motivation of team members, and the evaluation of team and individual performance.

Restricted to ENTS majors. All non-major students will need to obtain department permission.

0101	Clarence Wesley	Seats (Total: 40)
	M 2:00pm - 4:45pm	SQH 1105

The Economics of International Telecommunications

Restriction: Must be in Telecommunications (Master's) program.

Restricted to ENTS majors. All non-major students will need to obtain department permission.

0101	Michael Geppi	Seats (Total: 40)
	W 2:00pm - 4:45pm	SQH 1105

Telecommunications Marketing Management

Restriction: Must be in Telecommunications (Master's) program.

Restricted to ENTS majors. All non-major students will need to obtain department permission. [Click here for more course information.](#)

0101	Dan Goldsmith	Seats (Total: 50)
	W 5:30pm - 8:15pm	TYD 0117

Decision Support Methods for Telecommunication Managers

Restriction: Must be in Telecommunications (Master's) program.

The aim of this course is to introduce management science techniques for informed decision making. Topics covered can include data analysis and regression, optimization models and applications (workforce scheduling, manufacturing, network design, facility location), sensitivity analysis, decision trees, risk analysis and business simulation models. Emphasis will be on telecommunications managerial problems, model development and the use of software packages for decision support.

Restricted to ENTS majors. All non-major students will need to obtain department permission. Click [here](#) for more course information.

0101	Kazim Ruhi	Seats (Total: 40)
	M 5:30pm - 8:15pm	SQH 1105

ENTS640 Networks and Protocols I

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in Telecommunications (Master's) program.

An overview of design issues and the important industry standards for digital communications networks. This includes protocols, data communications technologies, error correction and detection, congestion control, traffic routing, Local Area Network (LAN) protocols, TCP/IP, and some security issues.

0101	Zoltan Safar	Seats (Total: 25)
	Th 5:30pm - 8:15pm	EGR 1108
	Tu 5:30pm - 8:15pm	AVW 1442 Lab
0102	Zoltan Safar	Seats (Total: 25)
	Th 5:30pm - 8:15pm	EGR 1108
	Tu 2:00pm - 4:45pm	AVW 1442 Lab

ENTS641 Networks and Protocols II

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: ENTS640. Restriction: Must be in Telecommunications (Master's) program.

Techniques for the specification, design, analysis, verification and testing of communication protocols are discussed. The course includes detailed discussion on routing protocols in the Internet. This includes Routing Information Protocol (RIP), Enhanced Interior Gateway Routing Protocol (EIGRP). Open Shortest Path First (OSPF), and Border Gateway Protocol (BGP4).

0101	Mehdi Kalantari Khandani	Seats (Total: 40)
	Th 5:30pm - 8:15pm	EGR 3106

ENTS653 AWS/PCS System Implementation

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in Telecommunications (Master's) program.

Engineering issues associated with designing and deploying a AWS/PCS cellular wireless communications system in the current world environment will be examined. The course will focus on implementation issues such as the impact of real world concerns on the deployment strategy and the use of good engineering practice to overcome obstacles. Students will create and modify mock deployments using professional tools for cell planning and interference analysis. Students will also be exposed to drive testing tools and concepts for migration to future technologies.

0101	Michael Dellomo	Seats (Total: 40)
	Tu 5:30pm - 8:15pm	CSI 3120

ENTS657 Satellite Communication Systems

Credits: 3 Grading Method: Regular,
 Audit

Credit only granted for: ENTS657 or ENTS689S. Formerly: ENTS689S.

An examination of satellite telecommunication systems with an emphasis on the mobile satellite systems (MSS). Topics will include a historical perspective, orbital mechanics and constellations, choice of orbital parameters, propagations considerations, link budgets, interference issues and other obstacles, and existing and proposed mobile satellite systems. It will also look at some of the business aspects such as the cost of deploying and maintaining these systems.

An examination of satellite telecommunication systems with an emphasis on the mobile satellite systems (MSS). Topics will include a historical perspective, orbital mechanics and constellations, choice of orbital parameters, propagations considerations, link budgets, interference issues and other obstacles, and existing and proposed mobile satellite systems. It will also look at some of the business aspects such as the cost of deploying and maintaining these systems.

0101	Michael Dellomo	Seats (Total: 30)
	W 5:30pm - 8:15pm	EGR 1104

ENTS669B Special Topics in Computing; Distributed Systems in a Virtual Environment

Credits: 3 Grading Method: Regular,
 Audit

Selected topics of current importance in computing.

0101	Jeffrey McKinney	Seats (Total: 18)
	M 5:30pm - 8:15pm	AVW 1442

ENTS669C Special Topics in Computing; Operating Systems

Credits: 3 Grading Method: Regular

Selected topics of current importance in computing.

0101	Anirudha Sahoo	Seats (Total: 30)
	W 5:30pm - 8:15pm	ITV 1111

ENTS669E Special Topics in Computing; Statistical Pattern Recognition

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Selected topics of current importance in computing.

Restriction: Permission of the instructor. The goal is to introduce mathematical pattern analysis and recognition. Emphasis is given to parametric and non-parametric statistical pattern recognition methods and clustering with applications to speech, image and video recognition.

0101	Ramalingam Chellappa	Seats (Total: 20)
	MW 11:00am - 12:15pm	CSI 1115

ENTS669I Special Topics in Computing; Advanced Laboratory of Digital Systems Using SystemsVerilog

Credits: 3 Grading Method: Regular,
Audit

Selected topics of current importance in computing.

0101	Jerry Wu	Seats (Total: 3)
	Tu 12:30pm - 1:45pm	KEB 2107
	F 11:00am - 1:50pm	KEB 2107 Lab

ENTS689A Special Topics in Telecommunications; Algorithms and Data Structures

Credits: 3 Grading Method: Regular,
Audit

Selected topics of current importance in telecommunications.

0101	Gang Qu	Seats (Total: 30)
	M 2:00pm - 4:45pm	ANS 0402

ENTS689F Special Topics in Telecommunications; Fundamentals of Wireless LANs

Credits: 3 Grading Method: Regular,
Audit

Selected topics of current importance in telecommunications.

0101	Rikin Thakker	Seats (Total: 30)
	F 5:30pm - 8:15pm	EGR 2116

ENTS699B Independent Study in Telecommunications; Embedded Signal Processing

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Individual instruction course. See ENTS program office for section number.

By Permission of ENTS Program Only.

0101	Shuvra Bhattacharyya	Seats (Total: 5)
	Contact instructor or department for details.	

ENTS749B Advanced Topics in Networking; Software-Defined Networking

Credits: 3 Grading Method: Regular,
Audit

Selected advanced topics in networking.

Please click [here](#) for further course information.

0101	Majid Raissi-Dehkordi	Seats (Total: 24)
	M 5:30pm - 8:15pm	AVW 1458

ENTS749D Advanced Topics in Networking; Network Design and Configuration Lab

Credits: 3 Grading Method: Regular,
Audit

Selected advanced topics in networking.

0101	Zoltan Safar	Seats (Total: 18)
	Th 9:00am - 11:45am	AVW 1442

ENTS759D Advanced Topics in Communications; Distributed Antenna Systems (DAS) and Small Cells

Credits: 3 Grading Method: Regular,
Audit

Selected advanced topics in communications.

Prerequisites: ENTS656 or ENTS653.

0101	Rikin Thakker	Seats (Total: 30)
	F 2:00pm - 4:45pm	CHE 2118

ENTS759F **Advanced Topics in Communications; 5G Radio Access Networks and Technologies**

Credits: 3 Grading Method: Regular

Selected advanced topics in communications.

0101	Kamran Etemad	Seats (Total: 24)
	M 10:00am - 12:45pm	AVW 1458

EPIB Epidemiology and Biostatistics Fall 2019

EPIB300 Biostatistics for Public Health Practice

Credits: 3 Grading Method: Regular, General Education: FSAR
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in CHEM131 and CHEM132. Restriction: Must be in Public Health Science program; and must have earned a minimum of 60 credits. Credit only granted for: EPIB300, EPIB315 or HLTH300.

An examination of biostatistical concepts and procedures as they relate to contemporary issues in public health. Focus on applications, hands-on-experience, and interpretations of statistical findings in public health research.

As agreed to during the change of major workshop or orientation to PHSC: PHSC students who declared their major BEFORE the spring 2018 semester are required to take EPIB300 before EPIB301. PHSC students who declared their major DURING the spring 2018 semester and later, are required to take EPIB301 before EPIB315.

0101	Rodman Turpin	Seats (Total: 20)
	TuTh 11:00am - 11:50am	ESJ 0224
	M 8:00am - 9:50am	SPH 0121 Discussion
0102	Rodman Turpin	Seats (Total: 20)
	TuTh 11:00am - 11:50am	ESJ 0224
	M 10:00am - 11:50am	SPH 0121 Discussion
0103	Rodman Turpin	Seats (Total: 20)
	TuTh 11:00am - 11:50am	ESJ 0224
	M 12:00pm - 1:50pm	SPH 0121 Discussion

0104	Rodman Turpin	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ESJ 0224	
	M 2:00pm - 3:50pm	SPH 0121	Discussion
0105	Rodman Turpin	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ESJ 0224	
	F 8:00am - 9:50am	SPH 0121	Discussion
0106	Rodman Turpin	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ESJ 0224	
	F 10:00am - 11:50am	SPH 0121	Discussion
0107	Rodman Turpin	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ESJ 0224	
	F 2:00pm - 3:50pm	SPH 0121	Discussion

EPIB301

Epidemiology for Public Health Practice

Credits: 3 Grading Method: Regular,
Pass-Fail

Restriction: Must be in Public Health Science program; or must be in Community Health program. And must have earned a minimum of 45 credits. Cross-listed with HLTH301. Credit only granted for: EPIB301 or HLTH301.

An examination of the discipline of epidemiology and its application to public health issues and practices, covering current epidemiological concepts and methods.

As agreed to during the change of major workshop or orientation to PHSC: PHSC students who declared their major BEFORE the spring 2018 semester are required to take EPIB300 before EPIB301. PHSC students who declared their major DURING the spring 2018 semester and later, are required to take EPIB301 before EPIB315.

0101	Natalie Slopen	Seats (Total: 19)	
	TuTh 2:00pm - 2:50pm	SPH 1312	
	M 9:00am - 9:50am	SPH 0116A	Discussion
<i>Restricted to Public Health Science majors at College Park.</i>			
0102	Natalie Slopen	Seats (Total: 19)	
	TuTh 2:00pm - 2:50pm	SPH 1312	
	M 10:00am - 10:50am	SPH 0116A	Discussion
<i>Restricted to Public Health Science majors at College Park.</i>			

0103	Natalie Slopen	Seats (Total: 19)	
	TuTh 2:00pm - 2:50pm	SPH 1312	
	M 11:00am - 11:50am	SPH 0116A	Discussion
	<i>Restricted to Public Health Science majors at College Park.</i>		
0104	Natalie Slopen	Seats (Total: 19)	
	TuTh 2:00pm - 2:50pm	SPH 1312	
	M 12:00pm - 12:50pm	SPH 0116A	Discussion
	<i>Restricted to Public Health Science majors at College Park.</i>		
0105	Natalie Slopen	Seats (Total: 19)	
	TuTh 2:00pm - 2:50pm	SPH 1312	
	M 1:00pm - 1:50pm	SPH 0116A	Discussion
	<i>Restricted to Public Health Science majors at College Park.</i>		
0106	Natalie Slopen	Seats (Total: 19)	
	TuTh 2:00pm - 2:50pm	SPH 1312	
	M 2:00pm - 2:50pm	SPH 0116A	Discussion
	<i>Restricted to Public Health Science majors at College Park.</i>		
0107	Natalie Slopen	Seats (Total: 19)	
	TuTh 2:00pm - 2:50pm	SPH 1312	
	M 3:00pm - 3:50pm	SPH 0116A	Discussion
	<i>Restricted to Public Health Science majors at College Park.</i>		
0108	Natalie Slopen	Seats (Total: 19)	
	TuTh 2:00pm - 2:50pm	SPH 1312	
	M 4:00pm - 4:50pm	SPH 0116A	Discussion
	<i>Restricted to Public Health Science majors at College Park.</i>		
0201	Natalie Slopen	Seats (Total: 15)	
	TuTh 2:00pm - 2:50pm	SPH 1312	
	M 9:00am - 9:50am	SPH 0301	Discussion
	<i>Restricted to students in the Behavioral and Community Health major.</i>		
0202	Natalie Slopen	Seats (Total: 15)	
	TuTh 2:00pm - 2:50pm	SPH 1312	
	W 1:00pm - 1:50pm	SPH 0301	Discussion
	<i>Restricted to students in the Behavioral and Community Health major.</i>		

0203	Natalie Slopen	Seats (Total: 15)	
	TuTh 2:00pm - 2:50pm	SPH 1312	
	W 2:00pm - 2:50pm	SPH 0301	Discussion
<i>Restricted to students in the Behavioral and Community Health major.</i>			

EPIB315

Biostatistics for Public Health Practice

Credits: 3

Grading Method: Regular,
Pass-Fail

General Education: FSAR

Prerequisite: Minimum grade of C- in EPIB301; or must have completed or be concurrently enrolled in HLTH200. Restriction: Must be in one of the following programs (Public Health Science; Community Health). Cross-listed with: HLTH300. Credit only granted for: EPIB300, EPIB315 or HLTH300.

Formerly: EPIB300. Additional information: Course is cross-listed; students should check program advising information to determine which counts for their major. Note that EPIB300 (old number) is still offered for students under previous curriculum.

An examination of biostatistical concepts and procedures as they relate to contemporary issues in public health. Focus on applications, hands-on-experience, and interpretations of statistical findings in public health research.

As agreed to during the change of major workshop or orientation to PHSC: PHSC students who declared their major BEFORE the spring 2018 semester are required to take EPIB300 before EPIB301. PHSC students who declared their major DURING the spring 2018 semester and later, are required to take EPIB301 before EPIB315.

0101	Rodman Turpin	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ESJ 0224	
	M 8:00am - 9:50am	SPH 0121	Discussion
<i>Restricted to College Park students in the Public Health Science major.</i>			
0102	Rodman Turpin	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ESJ 0224	
	M 10:00am - 11:50am	SPH 0121	Discussion
<i>Restricted to College Park students in the Public Health Science major.</i>			
0103	Rodman Turpin	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ESJ 0224	
	M 12:00pm - 1:50pm	SPH 0121	Discussion
<i>Restricted to College Park students in the Public Health Science major.</i>			

0104	Rodman Turpin	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ESJ 0224	
	M 2:00pm - 3:50pm	SPH 0121	Discussion
	<i>Restricted to College Park students in the Public Health Science major.</i>		
0105	Rodman Turpin	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ESJ 0224	
	F 8:00am - 9:50am	SPH 0121	Discussion
	<i>Restricted to College Park students in the Public Health Science major.</i>		
0106	Rodman Turpin	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ESJ 0224	
	F 10:00am - 11:50am	SPH 0121	Discussion
	<i>Restricted to College Park students in the Public Health Science major.</i>		
0107	Rodman Turpin	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	ESJ 0224	
	F 2:00pm - 3:50pm	SPH 0121	Discussion
	<i>Restricted to College Park students in the Public Health Science major.</i>		
0201	Rodman Turpin	Seats (Total: 30)	
	TuTh 11:00am - 11:50am	ESJ 0224	
	M 4:00pm - 5:50pm	SPH 0121	Discussion
	<i>Restricted to students in the Behavioral and Community Health major.</i>		
0202	Rodman Turpin	Seats (Total: 30)	
	TuTh 11:00am - 11:50am	ESJ 0224	
	F 12:00pm - 1:50pm	SPH 0121	Discussion
	<i>Restricted to students in the Behavioral and Community Health major.</i>		
ESG1	Raul Cruz-Cano	Seats (Total: 35)	
	M 9:00am - 11:30am	BLD3 3225	
	Class time/details on ELMs	ONLINE	Discussion
	<i>Restricted to Shady Grove students in the Public Health Sciences major.</i>		

EPIB330

The Coming Plague: Public Health Perspectives

Credits: 3

Grading Method: Regular

Prerequisite: BSCI202.

Disease control and prevention is fundamental to the health of local, national, and global populations. Infectious agents are constantly adapting and breaching our defenses. Factors related to society, the environment, and our increasing global interconnectedness increase the likelihood of disease emergence and spread. Vaccines and antibiotics, demographic changes and urbanization, climate change and natural disasters, international travel and commerce, poverty and war create conditions for infectious diseases to spread. So how do we design and execute solutions to public health threats? How do research, policies, interventions, and budgets affect public health systems?

0101	Olivia Carter-Pokras	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	CHE 2136
<i>Restricted to PHSC students at the College Park campus.</i>		

EPIB399 Epidemiology and Biostatistics Independent Study

Credits: 1-3 Grading Method: Regular

The EPIB undergraduate independent study is an opportunity for undergraduates from other departments in the SPH or the university to work with an Epidemiology and Biostatistics faculty member on research or special projects that are based out of EPIB.

Contact department for information to register for this course.

EPIB612 Epidemiologic Study Design

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: EPIB611.

Application of epidemiologic study designs, analytic methods used for analysis of cohort, case-control, cross-sectional, and clinical trials research.

Prequisites: EPIB650, EOIB610, and EPIB611.

0101	Hongjie Liu, Rodman Turpin	Seats (Total: 20)
	M 4:00pm - 6:45pm	SPH 0303

EPIB622 Social Determinants of Health

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have completed or be concurrently enrolled in SPHL602; or EPIB610.

Overview of the major social variables that affect public health, including socioeconomic status, poverty, income distribution, race, social networks/support, community cohesion, psychological stress, gender, and work and neighborhood environment.

0101	Sunmin Lee	Seats (Total: 20)
	Th 4:00pm - 6:45pm	SPH 0305

EPIB630 Epidemiologic Methods in Sexual and Reproductive Health Research

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have completed or be concurrently enrolled in SPHL602; or EPIB610.

Examination of epidemiologic methods (quantitative and qualitative) for collecting and analyzing data on sexual and reproductive health. The emphasis will be to introduce students to the appropriate methods used for challenging and sensitive research topics such as sexual behavior, HIV/STI, drug use, sexual abuse.

0101	Typhanye Dyer	Seats (Total: 20)
	Tu 11:00am - 1:45pm	SPH 0302

EPIB633 Health Survey Design and Analysis

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: SPHL602 or EPIB610; or permission of Instructor. Recommended: EPIB697.

An overview of types of survey research designs, questionnaire design, measurement issues, and techniques for recruiting and interacting with participants. Students will discuss and implement a variety of health survey analysis techniques, including how to utilize SAS statistical software to estimate descriptive statistics and implement regression models, while accounting for complex survey designs.

0101	Quynh Nguyen	Seats (Total: 25)
	W 1:00pm - 3:45pm	CCC 1111

EPIB651 Applied Regression Analysis

(Perm req) Credits: 3 Grading Method: Regular,
Audit

Prerequisite: 1 course with a minimum grade of B- from (SPHL602, EPIB650); or a minimum score of 70% on the SPHL602 or EPIB650 waiver exam. Recommended: EPIB697 or previous experience working with SAS is highly recommended.

An introduction to important statistical methods used in public health research, including nonparametric hypothesis testing, ANOVA, simple and multiple linear regression, logistic regression, and categorical data analysis.

0101	Mei-Ling Lee	Seats (Total: 20)
	Th 1:00pm - 3:45pm	SPH 0301

EPIB652 Categorical Data Analysis

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: EPIB651. Recommended: EPIB697 or previous experience working with SAS is highly recommended.

Methods for analysis of categorical data as applied to public health research, including contingency tables, logistic regression, multcategory logic models, loglinear models, and models for matched-pairs.

0101	Jing Zhang	Seats (Total: 20)
	W 4:15pm - 7:00pm	SPH 0301

EPIB655 Longitudinal Data Analysis

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: EPIB651.

Statistical models for drawing scientific inferences from longitudinal data, longitudinal study design, repeated measures and random effects to account for experimental designs that involve correlated responses, handling of missing data.

0101	Xin He	Seats (Total: 20)
	Tu 1:00pm - 3:45pm	SPH 0301

EPIB664 Missing Data Analysis

Credits: 3 Grading Method: Regular,
Audit

Recommended: Previous experience with at least one statistical software (e.g. SAS, R, STATA).

Missing data is a common problem in almost all scientific fields. Students will learn the different patterns and mechanisms of missing data, common procedures to handle missingness including weighting procedure, imputation-based procedure and model-based procedure. Useful and popular imputation methods and tools will be introduced. Numerous real data examples will be included to help students understand and solve the real world problem with missing data for different study designs.

0101	Tianzhou Ma	Seats (Total: 20)
	M 1:00pm - 3:45pm	SPH 0303

EPIB697 Public Health Data Management

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Permission of instructor.

This course is designed to provide students with the expertise needed to effectively manage research data using SAS as the statistical programming language.

0101	Raul Cruz-Cano	Seats (Total: 20)
	Tu 4:00pm - 6:45pm	SPH 0302

EPIB778 Internship in Public Health

(Perm req)

Credits: 1-4 Grading Method: Regular

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

Contact department for information to register for this course.

EPIB785 Internship in Public Health

(Perm req)

Credits: 1-3 Grading Method: Regular

Prerequisite: Permission of SPHL-Epidemiology & Biostatistics department. Repeatable to 3 credits.

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

Contact department for information to register for this course.

EPIB786 Capstone Project in Public Health

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of SPHL-Epidemiology & Biostatistics department.

Capstone experience providing opportunity to apply knowledge and skills to a specific public health problem or issue. Completion of project relevant to public health under the direction of an advisor.

Contact department for information to register for this course.

EPIB788 Critical Readings in Epidemiology and Biostatistics

(Perm req)

Credits: 1-3

Grading Method: Regular,
Audit

Open to master and doctoral students to discuss critical readings in Epidemiology and Biostatistics.

0101

Hongjie Liu

Seats (Total: 15)

Contact instructor or department for details.

EPIB798

Independent Study

(Perm req)

Credits: 1-6

Grading Method: Regular,
Audit

Master or doctoral students who desire to pursue special research problems under the direction of a faculty member of the department may register for 1-6 hours of credit under this number.

Contact department for information to register for this course.

EPIB799

Master's Thesis Research

(Perm req)

Credits: 1-6

Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

EPIB898

Pre-Candidacy Research

(Perm req)

Credits: 1-8

Grading Method: Regular

Contact department for information to register for this course.

EPIB899

Doctoral Dissertation Research

(Perm req)

Credits: 6

Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

FGSM

Federal and Global Fellows

Fall 2019

FGSM310

Political Engagement and Advocacy

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in the Federal Fellows Program; and permission of instructor. Cross-listed with: HONR378C.

An examination of questions and issues in the practice of political engagement and advocacy. Guest lecturers drawn from political, civic engagement, and advocacy arenas will visit class and participate in discussions.

Cross-listed with HONR378C. Credit granted for FGSM310 or HONR378C.

0101	Dale Crowell	Seats (Total: 20)
	M 6:30pm - 9:30pm	PLS 1111

FGSM320 Public Health Policy

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in the Federal Fellows Program; and permission of instructor. Credit only granted for: UNIV348P or FGSM320. Formerly: UNIV348P.

An exploration of the major questions and issues facing the U.S. health care system as well as the formulation and implementation of health policy.

Cross-listed with HONR378E. Credit granted for FGSM320 or HONR378E.

0101	Elaine Anderson, Samuel Kessel	Seats (Total: 20)
	Tu 3:30pm - 6:30pm	SPH 0308

FGSM330 Homeland and National Security Policy

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in the Federal Fellows Program; and permission of instructor. Credit only granted for: UNIV348T or FGSM330. Formerly: UNIV348T.

An examination of the concept of U.S. homeland and national security, threats, and major vulnerabilities in the context of recent history.

Cross-listed with HONR378G. Credit granted for FGSM330 or HONR378G.

0101	Magdalena Bajll	Seats (Total: 20)
	M 6:00pm - 9:00pm	PLS 1117

FGSM340 Energy and Environmental Policy

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in the Federal Fellows Program; and permission of instructor. Credit only granted for: UNIV348E or FGSM340. Formerly: UNIV348E.

An examination of issues of energy and environmental sustainability through an investigation of policy-making in energy, climate change, and sustainable development.

Cross-listed with HONR378J. Credit granted for FGSM340 or HONR378J.

0101	Ed Fendley	Seats (Total: 20)
	Tu 3:30pm - 6:30pm	HBK 1112

FGSM350 Critical Regions and International Relations

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in the Global Fellows Program; and permission of instructor.

An examination of international relations and foreign policy challenges in critical regions.

Cross-listed with HONR378K. Credit granted for FGSM350 or HONR378K.

0101	Sean Misko, Danusia Hubah	Seats (Total: 20)
	Th 7:00pm - 10:00pm	AJC 2134

FGSM360 U.S. Diplomacy and Policymaking

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in the Global Fellows Program; and permission of instructor.

An examination of questions and issues in the practice of contemporary diplomacy and policy-making. Guest lecturers drawn from Washington policy-making and foreign service communities will visit class and participate in discussion.

Cross-listed with HONR378A. Credit granted for FGSM360 or HONR378A.

0101	William Usher	Seats (Total: 20)
	Th 7:30pm - 10:00pm	ESJ 1309

FGSM370 Science Diplomacy: Foreign Policy & Science, Technology, and Innovation

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in the Global Fellows Program; and permission of instructor. Credit only granted for: UNIV389F or FGSM370. Formerly: UNIV389F.

An exploration of the critical roles scientific knowledge and technological innovation play in the formation and implementation of foreign policy issues, including energy and climate change, public health, space and innovation, and economic development.

Cross-listed with HONR378D. Credit granted for FGSM370 or HONR378D.

0101	Griffin Thompson, Jonathan Margolis	Seats (Total: 20)
	W 5:30pm - 8:30pm	SQH 1101

FGSM380 Responses to Global Challenges

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in the Global Fellows Program; and permission of instructor. Credit only granted for: UNIV389B or FGSM380. Formerly: UNIV389B.

An examination of global issues and responses primarily from the perspective of the practitioner. The focus will be on social, humanitarian, and human rights issues in different global contexts.

Cross-listed with HONR378B. Credit granted for FGSM380 or HONR378B.

0101	Rhoda Margesson	Seats (Total: 20)
	W 5:30pm - 8:30pm	AJC 2134

FGSM390 Water Security and Global Health Challenges

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in the Global Fellows Program AND Permission of Instructor. Cross-listed with: HONR378M.

An examination of questions and issues of water security and global health. Expert practitioners will also visit class and participate in discussions.

Restriction: Must be in Global Fellows Program; and permission of instructor.

0101	Winston Yu, Jonathan Margolis	Seats (Total: 21)
	W 3:00pm - 6:00pm	SQH 2120

FILM

Film Studies

Fall 2019

FILM245 Film Form and Culture

Credits: 3 Grading Method: Regular, CORE: HA General Education: DSHU
Pass-Fail, Audit

Cross-listed with ENGL245. Credit only granted for: ENGL245 or FILM245.

Introduction to film as art form and how films create meaning. Basic film terminology; fundamental principles of film form, film narrative, and film history. Examination of film technique and style over past one hundred years. Social and economic functions of film within broader institutional, economic, and cultural contexts.

0101	Eric Zakim	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	TWS 0320	
	F 1:00pm - 1:50pm	TWS 1107	Discussion
0102	Eric Zakim	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	TWS 0320	
	F 11:00am - 11:50am	TWS 1107	Discussion
0103	Eric Zakim	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	TWS 0320	
	F 1:00pm - 1:50pm	TWS 0214	Discussion
0104	Eric Zakim	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	TWS 0320	
	F 12:00pm - 12:50pm	TWS 0201	Discussion

FILM298B

Iranian Cinema

Credits: 3

Grading Method: Regular

General Education: DSHU

Cross-listed with: PERS283. Credit only granted for: PERS283 or FILM298B.

Introduction to Iranian cinema, society, and culture. Taught in English.

Cross-listed with FILM298B. Credit granted for PERS283, FILM283, or FILM298B.

0101	Matthew Miller	Seats (Total: 30)	
	MW 3:30pm - 4:45pm	JMZ 1122	

FILM298D

Special Topics in International Film Studies; Film Art in a Global Society

Credits: 3

Grading Method: Regular

General Education: DSHU,
DVUP

Special topics in International Film.

Cross-listed with CMLT280. Credit only granted for: CMLT280 or FILM298D.

0101	Shalom Rosenberg	Seats (Total: 30)	
	MWF 12:00pm - 12:50pm	JMZ 0125	

0201	Tung-An Wei	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	TWS 0201

FILM298T Special Topics in International Film Studies; Merchants, Rabbis and Schmaltz: The Politics of Jews and Film

Credits: 3 Grading Method: Regular General Education: DSHU

Special topics in International Film.

Cross-listed with JWST219T. Credit only granted for JWST219T or FILM298T . What are the different ways Jews and Jewishness have been represented inCinema over time? How have Jewish filmmakers used the cinematic medium to construct or deconstruct Jewish identity? Students will investigate different types of representations of Jews, asking how they operate in the context of the broader film traditions, and more.

0101	Adi Mahalel	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	SQH 1121

FILM301 Cinema History I: The Silent Era

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENGL245, FILM245, SLLC283, or FILM283; or permission of ARHU-College of Arts & Humanities.

Examines the development of silent cinema from the 1890s to the early 1930s drawing on at least five distinct national traditions (French, German, Russian, British, and American). Introduces students to key cinematic conventions as they emerged around the world.

0101	Oliver Gaycken	Seats (Total: 30)
	MW 10:00am - 11:50am	HBK 0105

FILM329G Special Topics in National/International Cinemas; One Hundred Years of Hollywood and Politics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Examine one or more national cinematic traditions (including Hollywood cinema), or may look across traditions comparatively, for example at international and/or transnational phenomena. Content varies.

Cross-listed with HIST319W. Credit granted for FILM329G or HIST319W.

0101	Saverio Giovacchini	Seats (Total: 40)
	MW 11:00am - 11:50am	KEY 0103
	Class time/details on ELMs	ONLINE

FILM334 Soviet Film: Propaganda, Myth, Modernism

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with RUSS334. Credit only granted for: RUSS334, FILM334, or RUSS298K. Formerly: RUSS298K.

A Survey of Soviet film from the 1920s to 1991, focusing on important directors, genres, themes, and styles. Taught in English.

0101	Elizabeth Papazian	Seats (Total: 30)
	MW 12:00pm - 1:50pm	ESJ B0322

FILM345 The Films of Alfred Hitchcock

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ENGL245, FILM245, SLLC283, or FILM283; or permission of ARHU-College of Arts & Humanities. Credit only granted for: FILM345 or ENGL329J.

An examination of important Hitchcock films from the perspective of innovation, aesthetics, and cultural history.

Prerequisite: ENGL245, FILM245, FILM283, or SLLC283; or permission of instructor. Cross-listed with FILM345. Credit only granted for FILM345 or ENGL329J.

0101	Marianne Conroy	Seats (Total: 30)
	MW 2:00pm - 3:15pm	TWS 1320

FILM359Z Special Topics in Genres/Auteurs/Cinema Movements; The Global Western

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Examine narrative cinema from the perspective of content (themes, issues, structures) and style through the lens of genre, auteurship (a concept of authorship in film studies), and/or historical aesthetic movements that have been influential in the development of cinema as an art and film studies as a field. Content varies.

0101	Eric Zakim, Elizabeth Papazian	Seats (Total: 31)
	MW 10:00am - 12:00pm	ESJ B0322

FILM388 Experiential Learning: Film Studies

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail

Connects students' theoretical understanding of film studies, as obtained through the classroom, to professional experience.

Contact department for information to register for this course.

FILM429K Special Topics in National/International Cinemas; Youth, Identity, Nation: A Survey of Quebec Cinema

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Courses in National/International Cinemas may examine one or more national cinematic traditions (including Hollywood cinema), or may look across traditions comparatively, for example at international and/or transnational phenomena. Content varies.

Cross-listed with FREN499C. Credit granted for FILM429K or FREN499C. Taught in English.

0101	Mercedes Baillargeon	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	JMZ 2206

FILM429P Special Topics in National/International Cinemas; French Cinema: A Cultural Approach

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Courses in National/International Cinemas may examine one or more national cinematic traditions (including Hollywood cinema), or may look across traditions comparatively, for example at international and/or transnational phenomena. Content varies.

Cross-listed with FREN499A. Credit granted for FILM429P or FREN499A. Taught in French.

0101	Caroline Eades	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	JMZ 0208

FILM469G Special Topics in Film Theories II; Cinema in the History of Media

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics in film theories.

0101	Luka Arsenjuk	Seats (Total: 15)
	W 2:00pm - 5:00pm	ESJ B0322

FILM499 Directed Study in Film Studies

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Readings and Research in Film Studies under faculty supervision.

Contact department for information to register for this course.

FIRE First-Year Innovation & Research Experience

Fall 2019

FIRE120 FIRE SEMESTER 1

Credits: 3 Grading Method: Regular General Education: DSSP

Additional information: This is the first course in the FIRE (First-Year Innovation & Research Experience) program sequence.

Engages the research process through the design, research, collaborative authorship and iterative review-based refinement of research proposals. Students find and analyze primary literature, think creatively, author and communicate research proposals in a scholarly fashion and work collaboratively to solve scientific and societal problems using technology, delegation and productive team communication.

0101	Carolina Vieira	Seats (Total: 35)
	M 12:00pm - 12:50pm	ATL 2339
	Contact instructor or department for details.	
	<i>This section restricted to BioFIRE students.</i>	
0201	Cristina Risco	Seats (Total: 40)
	F 11:00am - 11:50am	ATL 2339
	Contact instructor or department for details.	
0301	Emina Herovic	Seats (Total: 40)
	M 2:00pm - 2:50pm	ATL 2339
	Contact instructor or department for details.	
0401	Yun Choi	Seats (Total: 40)
	M 3:00pm - 3:50pm	ATL 2339
	Contact instructor or department for details.	

0501	Kyungjin Yoo M 4:00pm - 4:50pm Contact instructor or department for details.	Seats (Total: 40) ATL 2339	
0601	Frances Clark F 9:00am - 9:50am Contact instructor or department for details.	Seats (Total: 40) ATL 2339	
0701	Raymond Tu F 10:00am - 10:50am Contact instructor or department for details.	Seats (Total: 40) ATL 2339	
0801	Catherine Spirito M 1:00pm - 1:50pm Contact instructor or department for details. <i>This section restricted to BioFIRE students.</i>	Seats (Total: 35) ATL 2339	
0901	Jonathan Goodson F 12:00pm - 12:50pm Contact instructor or department for details.	Seats (Total: 40) ATL 2339	
1101	Muge Karagoz F 1:00pm - 1:50pm Contact instructor or department for details.	Seats (Total: 40) ATL 2339	
1201	Derrick Yeo F 2:00pm - 2:50pm Contact instructor or department for details.	Seats (Total: 40) ATL 2339	
1301	Alexandra Jones F 3:00pm - 3:50pm Contact instructor or department for details.	Seats (Total: 40) ATL 2339	
1401	Thanicha Ruangmas F 4:00pm - 4:50pm Contact instructor or department for details.	Seats (Total: 40) ATL 2339	
FCB1	Mohammad Fazelpour Th 6:00pm - 6:50pm Class time/details on ELMs <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 38) ATL 2339 ONLINE	Discussion

Credits: 3

Grading Method: Regular

General Education: DSSP

Additional information: This is the first course in the FIRE (First-Year Innovation & Research Experience) program sequence.

Engages the research process through the design, research, collaborative authorship and iterative review-based refinement of research proposals. Students find and analyze primary literature, think creatively, author and communicate research proposals in a scholarly fashion and work collaboratively to solve scientific and societal problems using technology, delegation and productive team communication.

0101	Jessica O'Hara	Seats (Total: 40)
	M 11:00am - 11:50am	ATL 2339
	Contact instructor or department for details.	
0201	Ian Page	Seats (Total: 40)
	W 9:00am - 9:50am	ATL 2339
	Contact instructor or department for details.	

FIRE251

FIRE SEMESTER 3: Sustainability Analytics

Credits: 3

Grading Method: Regular

General Education: DSSP

Prerequisite: FIRE151.

FIRE SEMESTER 3 course for students in the FIRE program joining the Sustainability Analytics research stream.

0101	Thanicha Ruangmas	Seats (Total: 36)
	Tu 11:00am - 11:50am	ATL 2339
	Contact instructor or department for details.	

FIRE253

FIRE SEMESTER 3: Found In Translation

Credits: 3

Grading Method: Regular

General Education: DSSP

Prerequisite: FIRE153.

FIRE SEMESTER 3 course for students in the FIRE program joining the Found In Translation research stream.

0101	Carolina Vieira	Seats (Total: 36)
	W 12:00pm - 12:50pm	ATL 2339
	Contact instructor or department for details.	

FIRE254

FIRE SEMESTER 3: Risk Communication & Resilience

Credits: 3

Grading Method: Regular

General Education: DSSP

Prerequisite: FIRE154.

FIRE SEMESTER 3 course for students in the FIRE program joining the Risk Communication and Resilience research stream.

0101	Emina Herovic	Seats (Total: 36)
	Tu 12:30pm - 1:20pm	ATL 2339
	Contact instructor or department for details.	

FIRE257

FIRE SEMESTER 3: Addiction Science

Credits: 3

Grading Method: Regular

General Education: DSSP

Prerequisite: FIRE157.

FIRE SEMESTER 3 course for students in the FIRE program joining the Addiction Science research stream.

0101	Cristina Risco	Seats (Total: 36)
	W 3:00pm - 3:50pm	ATL 2339
	Contact instructor or department for details.	

FIRE260

FIRE SEMESTER 3: Transgenerational Brain Initiative

Credits: 3

Grading Method: Regular

General Education: DSSP

Prerequisite: FIRE160.

FIRE SEMESTER 3 course for students in the FIRE program joining the Transgenerational Brain Initiative research stream.

0101	Yun Choi	Seats (Total: 36)
	W 4:00pm - 4:50pm	ATL 2339
	Contact instructor or department for details.	

FIRE263

FIRE SEMESTER 3: Animal and Human Relationships

Credits: 3

Grading Method: Regular

General Education: DSSP

Prerequisite: FIRE163.

FIRE SEMESTER 3 course for students in the FIRE program joining the Animal and Human Relationships research stream.

0101	Bridget Makol	Seats (Total: 20)
	Th 11:00am - 11:50am	ATL 2339
	Contact instructor or department for details.	
	<i>For students registering to be a part of the Human Relationships research team.</i>	
0201	Bridget Makol	Seats (Total: 15)
	Th 11:00am - 11:50am	ATL 2339
	Contact instructor or department for details.	
	<i>For students registering to be a part of the Animal Relationships research team.</i>	

FIRE264

FIRE SEMESTER 3: Autonomous Unmanned Systems

Credits: 3

Grading Method: Regular

General Education: DSSP

Prerequisite: FIRE164.

FIRE SEMESTER 3 course for students in the FIRE program joining the Autonomous Unmanned Systems research stream.

0101	Derrick Yeo	Seats (Total: 36)
	Tu 3:30pm - 4:20pm	ATL 2339
	Contact instructor or department for details.	

FIRE265

FIRE SEMESTER 3: Designing Innovations

Credits: 3

Grading Method: Regular

General Education: DSSP

Prerequisite: FIRE165.

FIRE SEMESTER 3 course for students in the FIRE program joining the Designing Innovations research stream.

0101	Mohammad Fazelpour	Seats (Total: 18)
	Th 12:30pm - 1:20pm	ATL 2339
	Contact instructor or department for details.	

FIRE266

FIRE SEMESTER 3: Evolution of Sex Differences

Credits: 3

Grading Method: Regular

General Education: DSSP

Prerequisite: FIRE166.

FIRE SEMESTER 3 course for students in the FIRE program joining this research group.

0101	Frances Clark	Seats (Total: 36)
	Th 2:00pm - 2:50pm	ATL 2339
	Contact instructor or department for details.	

FIRE270

FIRE SEMESTER 3: Phillips Virtual Culture

Credits: 3

Grading Method: Regular

General Education: DSSP

Prerequisite: FIRE170.

FIRE SEMESTER 3 course for students in the FIRE program joining the Phillips Virtual Culture research stream.

0101	Kyungjin Yoo	Seats (Total: 36)
	Th 3:30pm - 4:20pm	ATL 2339
	Contact instructor or department for details.	

FIRE271

FIRE SEMESTER 3: Capital One Machine Learning

Credits: 3

Grading Method: Regular

General Education: DSSP

Prerequisite: FIRE171.

FIRE SEMESTER 3 course for students in the FIRE program joining the Capital One Machine Learning research stream.

0101	Raymond Tu	Seats (Total: 36)
	W 2:00pm - 2:50pm	ATL 2339
	Contact instructor or department for details.	

FIRE272

FIRE SEMESTER 3: Engineering Biosensors

Credits: 3

Grading Method: Regular

General Education: DSSP

Prerequisite: FIRE172.

FIRE SEMESTER 3 course for students in the FIRE program joining the Engineering Biosensors research stream.

0101	Catherine Spirito	Seats (Total: 36)
	W 10:00am - 10:50am	ATL 2339
	Contact instructor or department for details.	

FIRE273

FIRE SEMESTER 3: Deep Brain Neurotech

Credits: 3

Grading Method: Regular

General Education: DSSP

Prerequisite: FIRE173.

FIRE SEMESTER 3 course for students in the FIRE program joining the Deep Brain Neurotech research stream.

0101	Jonathan Goodson	Seats (Total: 36)
	W 1:00pm - 1:50pm	ATL 2339
	Contact instructor or department for details.	

FIRE276 **FIRE SEMESTER 3: Simulating Particle Detection**

Credits: 3 Grading Method: Regular General Education: DSSP

Recommended: FIRE120.

FIRE SEMESTER 3 course for students in the FIRE program joining this research group.

0101	Muge Karagoz	Seats (Total: 36)
	Tu 2:00pm - 2:50pm	ATL 2339
	Contact instructor or department for details.	

FIRE277 **FIRE SEMESTER 3: Atmospheric Data Science**

Credits: 3 Grading Method: Regular General Education: DSSP

Recommended: FIRE120.

FIRE SEMESTER 3 course for students in the FIRE program joining this research group.

0101	Alexandra Jones	Seats (Total: 36)
	Th 9:30am - 10:20am	ATL 2339
	Contact instructor or department for details.	

FIRE280 **FIRE SEMESTER 3: Host-Pathogen Interactions**

Credits: 3 Grading Method: Regular General Education: DSSP

Recommended: FIRE120.

FIRE SEMESTER 3 course for students in the FIRE program joining this research group.

0101	Jessica O'Hara	Seats (Total: 36)
	W 11:00am - 11:50am	ATL 2339
	Contact instructor or department for details.	

FMSC110**Families and Global Health**

Credits: 3

Grading Method: Regular

General Education: DSHS,
DVCC

Students will explore, define, and study global health, social determinants of health, health inequalities, gender inequality, family violence, and maternal and child health using a global perspective.

0101	Laura Drew	Seats (Total: 40)
	TuTh 9:30am - 10:45am	SPH 0302

FMSC110S**Families and Global Health**

Credits: 3

Grading Method: Regular

General Education: DSHS,
DVCC

Students will explore, define, and study global health, social determinants of health, health inequalities, gender inequality, family violence, and maternal and child health using a global perspective.

0101	Elisabeth Maring	Seats (Total: 96)
	TuTh 11:00am - 12:15pm	CCC 1100
	<i>Restricted to CPSP Global Public Health students.</i>	

FMSC111**Credit Cards and College Students**

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

Recommended: Moderate level of computer literacy, especially Internet and ELMS. Reliable computer and Internet access. Credit only granted for: FMSC111, FMSC341 or FMSC498D. Formerly: FMSC498D.

Provides college students with factual information about basic money management skills, emphasizing the responsible use of credit, specifically credit cards. Topics will include financial goals, spending plan, wise use of credit, debt management, consumer credit protection, and ID Theft. Online lessons will include video clips and interactive class activities. Students will learn the basics to build a strong financial future.

FCW1	Mia Russell	Seats (Total: 45)
	Meets October 14, 2019 - December 9, 2019	
	Class time/details on ELMS	ONLINE
	<i>Restricted to students in Freshmen Connection.</i>	

FMSC170**Future of Families: Issues and Controversies**

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit SCIS

Credit only granted for: FMSC170 or FMSC298F. Formerly: FMSC298F.

Examination of current trends and controversial issues in family life, including issues of marriage, reproductive technologies, adoption, child custody, remarriage, and marital violence.

FC01	Kimberly Van Putten-Gardner	Seats (Total: 50)
	TuTh 3:00pm - 4:15pm	ESJ 2309
<i>Restricted to students in Freshmen Connection.</i>		

FMSC186 Family Law and Ethics in Assisted Reproduction

Credits: 1 Grading Method: Regular

For students interested in studying the law, public health and/or family science, this course examines the cutting-edge law and ethics of assisted reproduction including the technologies of sperm and egg donation, in vitro fertilization, surrogacy, and reproductive organ transplants, and the impact on families.

FCW1	Kerry Tripp	Seats (Total: 25)
	Meets October 14, 2019 - December 9, 2019	
	Class time/details on ELMs	ONLINE
<i>Restricted to students in Freshmen Connection.</i>		

FMSC190 Man Up! Where Are The Fathers?

Credits: 3 Grading Method: Regular General Education: DSHS,
SCIS

An examination of changing fatherhood roles, health, and inequality in diverse families. Focus will be on masculinities and disparities among men by race and class; provider role expectations; and trauma and violence faced by men in contemporary society.

0101	Kevin Roy	Seats (Total: 80)
	MWF 11:00am - 11:50am	CCC 1205

FMSC260 Couple Relationships

Credits: 3 Grading Method: Regular, General Education: DSHS
Pass-Fail, Audit

Credit only granted for: FMSC260 or FMST260. Formerly: FMST260.

Couple relationships and their alternatives in contemporary dating, courtship and marriage.

Restricted to Majors or non-majors with less than or equal to 60 credits.

0101	Elise Resnick	Seats (Total: 55)
	TuTh 12:30pm - 1:45pm	SYM 0200

FMSC290 Family Economics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: FMSC290 or FMST290. Formerly: FMST290.

Application of economic methodology to study families under various economic situations. Examination of how decisions about marriage, divorce, fertility, consumption and time use are influenced by labor/housing markets, tax structure, social welfare benefits and other economic considerations.

Restricted to Majors or non-majors with less than or equal to 60 credits.

0101	Manouchehr Mokhtari	Seats (Total: 65)
	TuTh 5:00pm - 6:15pm	SPH 1312

FMSC302 Research Methods in Family Science

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit DSSP

Prerequisite: Must have completed an introductory statistics course. Restriction: Must be in a major within SPHL-Family Science department. Credit only granted for: FMSC302 or FMST302. Formerly: FMST302.

Introduction to the methods of the social and behavioral sciences employed in family science. The role of theory, the development of hypotheses, measurement, design, and data analysis.

0101	Dane De Silva	Seats (Total: 75)
	TuTh 9:30am - 10:45am	SPH 1303

FMSC310 Maternal, Child and Family Health

Credits: 3 Grading Method: Regular,
Pass-Fail

Credit only granted for: FMSC310, FMSC410 or FMSC498A. Formerly: FMSC498A and FMSC410. Additional information: A comprehensive understanding of maternal, child, and family health, with additional emphasis on environmental health, needs assessment and evaluation, enabling students to more effectively address issues in the workplace.

Overview of the major issues in Maternal, Child, and Family Health in the U.S. and the world. The course will cover the social, political, environmental, and economic factors that shape the health of women, children, and families throughout the life course. It will employ the core disciplines of public health -- 1) epidemiology/biostatistics, 2) environmental health, 3) health policy and administration, and 4) social and behavioral health -- to examine these factors. The course introduces specific issues and interventions and places these issues and interventions within their broad sociohistorical context.

0101	Edmond Shenassa	Seats (Total: 45)
	MWF 11:00am - 11:50am	SPH 1302
0201	Edmond Shenassa	Seats (Total: 45)
	TuTh 11:00am - 12:15pm	SPH 1302

FMSC330

Family Theories and Patterns

Credits: 3

Grading Method: Regular,
Audit

General Education: DSHS,
DVUP

Restriction: Junior standing or higher. Credit only granted for: FMSC330 or FMST330. Formerly: FMST330.

Theory and research on the family, including a cross-cultural analysis of family patterns.

0101	Elise Resnick	Seats (Total: 60)
	TuTh 9:30am - 10:45am	SPH 1301
0201	Samuel Allen	Seats (Total: 55)
	TuTh 12:30pm - 1:45pm	SPH 1302

FMSC332

Children in Families

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHS

Prerequisite: PSYC100 or FMSC105. Credit only granted for: FMSC332 or FMST332. Formerly: FMST332.

A family life education approach to the study of children and families. Emphasis on the interaction of children with parents, siblings, extended kin, and the community.

0101	Amy Lewin	Seats (Total: 65)
	TuTh 11:00am - 12:15pm	SPH 1303
0201	C Conway	Seats (Total: 65)
	TuTh 2:00pm - 3:15pm	SPH 1303

0301	Christine Schull	Seats (Total: 65)
	MW 8:00am - 8:50am	SPH 1301
	F 8:00am - 8:50am	ONLINE

FMSC341 Personal and Family Finance

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Credit only granted for: FMSC341 or FMST341. Formerly: FMST341.

Individual and family financial strategies with emphasis on financial planning, savings, investments, insurance, income taxes, housing, and use of credit. Planning, analyzing, and controlling financial resources to resolve personal/family financial problems and to attain financial security.

0101	Manouchehr Mokhtari	Seats (Total: 60)
	TuTh 6:30pm - 7:45pm	SPH 1312
0201	William Knight	Seats (Total: 49)
	Class time/details on ELMs	ONLINE
ESG1	William Knight	Seats (Total: 22)
	Class time/details on ELMs	ONLINE
<i>Restricted to students in the BSIS @ USG Program.</i>		

FMSC381 Poverty, Affluence, and Families

Credits: 3 Grading Method: Regular, Pass-Fail, Audit, D General Education: DSHS, DVUP

Prerequisite: SOCY100 or SOCY105. Restriction: Must be in a major within SPHL-Family Science department. Credit only granted for: FMSC381 or FMST381. Formerly: FMST381.

Social, political, cultural and economic factors influencing income and wealth in American families.

0101	Kevin Roy	Seats (Total: 50)
	MWF 9:00am - 9:50am	SPH 1302
0201	Laura Golojuch	Seats (Total: 50)
	TuTh 3:30pm - 4:45pm	SPH 1303

FMSC383 Delivery of Human Services to Families

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

*Prerequisite: FMSC330. Restriction: Must be in a major within SPHL-Family Science department.
Credit only granted for: FMSC383 or FMST383. Formerly: FMST383.*

Processes of service delivery with special emphasis upon relationships among managers, service providers and clients. The impact of human service systems on families.

0101	Marian Jones	Seats (Total: 65)
	MWF 11:00am - 11:50am	SPH 1301

FMSC399 Independent Study

(Perm req)

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

FMSC431 Family Crises and Intervention

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PSYC100.

Examines the stressors in life that may lead families into a state of crisis or emergency and what can be done to help families when the need arises. Both internal stressors, such as substance abuse, finances, divorce, illness or parent-child conflict, and external stressors, such as community violence and natural disasters, are examined. Using theories and techniques for intervention and enhancement, the course examines factors involved in stressors turning into a family crisis and how factors such as emergency preparedness, social support and public policy can be a source of family resilience or protect families from negative outcomes.

0101	Elaine Anderson	Seats (Total: 65)
	TuTh 12:30pm - 1:45pm	SPH 1301

FMSC432 Adult Development and Aging in Families

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PSYC100; and (SOCY100 or SOCY105). And FMSC332; or must have completed a comparable development course. Restriction: Must be in a major within SPHL-Family Science department. Credit only granted for: FMSC432 or FMST432. Formerly: FMST432.

Theory, research, history, and programming related to adult development and aging in the intergenerational context of family.

Designed for students interested in studying the law, public health, and family science, this course provides students with a general overview of family law and the impact on healthy families. The course also includes the study of cutting-edge issues such as marriage equality, assisted reproduction and ethical issues that may arise.

0101	Kerry Tripp TuTh 9:30am - 10:45am	Seats (Total: 55) SPH 1302
0201	Kerry Tripp TuTh 12:30pm - 1:45pm	Seats (Total: 55) SPH 1303

FMSC498 Special Topics: Family Science; Family Studies

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail

Special course topics in family studies.

Contact department for information to register for this course.

FMSC498H Special Topics: Family Science; Family Studies Honors Thesis

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Special course topics in family studies.

Contact department for information to register for this course.

FMSC498P Special Topics: Family Science

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Special course topics in family studies.

0101	Adele Robinson TuTh 9:30am - 10:45am	Seats (Total: 24) TLF 1101
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FMSC606 Ethnic Families and Health Disparities

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: FMSC606 or FMST606. Formerly: FMST606.

Historical, psychosocial, economic, and political factors influencing the structure and functioning of ethnic families. Overview of racial and ethnic health disparities over the life course and ways in which they are influenced by multi-level contextual factors.

Credit only granted for: FMSC606 or FMST606. Formerly: FMST606. Historical, psychosocial, economic, and political factors influencing the structure and functioning of ethnic families. Overview of racial and ethnic health disparities over the life course and ways in which they are influenced by multi-level contextual factors.

0101	Mia A Smith-Bynum	Seats (Total: 15)
	Th 2:00pm - 4:45pm	Location: TBA

FMSC640 Family Therapy: Theory and Techniques

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: FMSC640 or FMST640. Formerly: FMST640.

Overview of fundamental theoretical concepts and clinical procedures in marital and family therapy, with an emphasis on those therapies which operate from a family systems perspective.

0101	Patricia Barros	Seats (Total: 11)
	M 10:00am - 12:45pm	Location: TBA

FMSC642 Normal and Abnormal Individual and Family Development

(Perm req) Credits: 3 Grading Method: Regular,
Audit

Prerequisite: FMSC640. Credit only granted for: FMSC642 or FMST642. Formerly: FMST642.

Normal development and psychopathology in the family system. Emphasis on parent-child relationships and application of the current Diagnostic and Statistical Manual of Mental Disorders (DSM) to family therapy.

Formerly: FMST642. Credit only granted for FMSC642 or FMST642. Prerequisite: FMSC640. Normal development and psychopathology in the family system. Emphasis on parent-child relationships and application of the current Diagnostic and Statistical Manual of Mental Disorders (DSM) to family therapy.

0101	Leigh Leslie	Seats (Total: 15)
	Tu 1:00pm - 3:45pm	Location: TBA

FMSC650 Ethical, Legal, and Professional Principles in Marriage and Family Therapy

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: Permission of SPHL-Family Science department. Restriction: Must be in Couple and Family Therapy (Master's) program. Credit only granted for: FMSC650 or FMST650. Formerly: FMST650.

An introduction to the basic principles and practices of family therapy. Emphasis on basic therapy skills applied to a family context and on professional ethics of the family practitioner. Addresses therapist's legal responsibilities and liabilities, certification, and licensure issues.

0101	Jodi Cobb	Seats (Total: 25)
	Tu 9:00am - 11:45am	Location: TBA

FMSC652

Diagnosis and Treatment of Mental and Emotional Disorders in Family Systems

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: FMSC651. Restriction: Must be in Couple and Family Therapy (Master's) program. Credit only granted for: FMSC652 or FMST652. Formerly: FMST652.

Systematic assessment, diagnosis, and treatment of mental and emotional disorders in couples and families. Utilization and critique of the current Diagnostic Statistical Manual Disorders (DSM).

0101	Mona Mittal	Seats (Total: 20)
	Tu 9:00am - 11:45am	Location: TBA

FMSC658

Supervised Clinical Practice of Marriage and Family Therapy

(Perm req)

Credits: 1-3

Grading Method: Regular,
Audit

The supervision of marriage and family therapy client contact. Various family systems models of supervision applied via extant methods, including live, videotaped, and audiotaped.

Prerequisite: FMST 650 and permission of instructor.

0101	Patricia Barros	Seats (Total: 20)
	W 9:00am - 12:00pm	Location: TBA

FMSC660

Program Planning and Evaluation in Family Science

Credits: 3

Grading Method: Regular,
Audit

Credit only granted for: FMSC660 or FMST660. Formerly: FMST660.

Theory and methods of program planning and evaluation with special emphasis on family programs. Assessment of program goals and the social and psychological factors involved in program implementation. Methods for measuring the effectiveness of program delivery, as well as the impact of services on family functioning.

Formerly: FMST660. Credit only granted for FMSC660 or FMST660. Theory and methods of program planning and evaluation with special emphasis on family programs. Assessment of program goals and the social and psychological factors involved in program implementation. Methods for measuring the effectiveness of program delivery, as well as the impact of services on family functioning.

0101	Amy Lewin	Seats (Total: 15)
	M 1:00pm - 3:45pm	Location: TBA

FMSC689 Research Internship

(Perm req)

Credits: 3 Grading Method: Regular

Research experience resulting in a scholarly article suitable for publication in a peer-reviewed journal.

Contact department for information to register for this course.

FMSC698 Advanced Topics in Family Science

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

Arranged group study on specific topic which may vary from term to term.

Must have written permission of faculty member and chairperson.

Contact department for information to register for this course.

FMSC699 Independent Study

(Perm req)

Credits: 1-6 Grading Method: Regular,
Audit

Contact department for information to register for this course.

FMSC745 Gender and Ethnicity in Family Therapy and Service Delivery

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: FMSC745 or FMST745. Formerly: FMST745.

Major critiques of sources of racial, cultural, and gender bias in marital and family therapy and family service delivery. Addresses these issues in program development and clinical practice.

0101	Leigh Leslie	Seats (Total: 15)
	Th 9:00am - 11:45am	Location: TBA

FMSC789

Non-Thesis Research

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

Non-thesis option research papers.

Contact department for information to register for this course.

FMSC799

Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular

Must have written permission of faculty member and chairperson.

Contact department for information to register for this course.

FMSC879

Preparing Future Faculty and Professionals Seminar

(Perm req)

Credits: 1 Grading Method: Regular

Development of skills necessary to obtain and succeed in academic and non-academic positions in family science and public health. Topics include: career mapping, networking, teaching/teaching portfolios, independent research, publishing, grant writing, program and policy evaluation, consulting, job search, interviewing and negotiation, mentoring, diversity, work-family balance, and ethical issues in the workplace. Periodic visits to universities and government/nonprofit employers.

Development of skills necessary to obtain and succeed in academic and non-academic positions in family science and public health.

0101	Sandra Quinn	Seats (Total: 30)
	W 1:00pm - 1:50pm	Location: TBA

FMSC898

Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

FMSC899

Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

FREN103 Intensive Elementary French

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not have completed FREN102; and must not be a native/fluent speaker of French. Credit only granted for: FREN102 or FREN103.

Covers speaking, reading, writing, listening, and culture of French-speaking world.

0101	Inaam Ngadi	Seats (Total: 25)
	MWF 10:00am - 10:50am	JMZ 2123
	Class time/details on ELMs	ONLINE
0102	Clara Bichon	Seats (Total: 25)
	MWF 11:00am - 11:50am	PLS 1172
	Class time/details on ELMs	ONLINE
0103	Guilhem Le Saux	Seats (Total: 25)
	MWF 12:00pm - 12:50pm	JMZ 1122
	Class time/details on ELMs	ONLINE

FREN203 Intensive Intermediate French

Credits: 4 Grading Method: Regular, CORE: HO
Pass-Fail, Audit

Prerequisite: FREN103; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a native/fluent speaker of French. Credit only granted for: FREN201 or FREN203.

Covers speaking, reading, writing, listening, and culture of French-speaking world.

0101	Elizabeth Robinson	Seats (Total: 25)
	MWF 9:00am - 9:50am	JMZ 2123
	Class time/details on ELMs	ONLINE
0102	Elizabeth Robinson	Seats (Total: 25)
	MWF 11:00am - 11:50am	JMZ 2123
	Class time/details on ELMs	ONLINE

0103	Francesca Roth	Seats (Total: 25)
	MWF 12:00pm - 12:50pm	JMZ 0103
	Class time/details on ELMs	ONLINE
0104	Francesca Roth	Seats (Total: 25)
	MWF 1:00pm - 1:50pm	JMZ 3205
	Class time/details on ELMs	ONLINE

FREN204 French Grammar and Composition

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: FREN201 or FREN203; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Not open to native/fluent speakers of French.

Intensive study of French grammar and composition.

0101	Leandra Cormier	Seats (Total: 25)
	MWF 10:00am - 10:50am	JMZ 2117
	Class time/details on ELMs	ONLINE
0102	Leandra Cormier	Seats (Total: 25)
	MWF 11:00am - 11:50am	JMZ 2206
	Class time/details on ELMs	ONLINE

FREN211 French Reading and Conversation

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: FREN201 or FREN203. Restriction: Must not be a native/fluent speaker of French.

Practice in spoken French at intermediate level based on readings in a variety of genres. Written homework and exams.

Contact department for information to register for this course.

FREN250 Introduction to Cultural and Textual Analysis

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL General Education: DSHU

Prerequisite: FREN204; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a native/fluent speaker of French. Credit only granted for: FREN250 or FREN250H.

Introduction to cultural and textual analysis of selected readings from various genres in French literature. Taught in French.

Jointly offered with FREN 250H.

0101	Mercedes Baillargeon	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	JMZ 1117
0201	Charlee Bezilla	Seats (Total: 25)
	MW 2:00pm - 3:15pm	JMZ 0125

FREN250H Introduction to Cultural and Textual Analysis

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL General Education: DSHU

Prerequisite: FREN204; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a native/fluent speaker of French. Credit only granted for: FREN250 or FREN250H.

Introduction to cultural and textual analysis of selected readings from various genres in French literature. Taught in French.

For general honors students only. Jointly offered with FREN 250.

0101	Mercedes Baillargeon	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	JMZ 1117
0201	Charlee Bezilla	Seats (Total: 25)
	MW 2:00pm - 3:15pm	JMZ 0125

FREN269F Special Topics in Study Abroad II; French Conversation I

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

FREN269G Special Topics in Study Abroad II; French Conversation

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

FREN269P Special Topics in Study Abroad II; Perspectives on Contemporary France

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

FREN301 Composition and Style

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: FREN250; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a native/fluent speaker of French.

Grammatical analysis, elements of style; range of written genres.

0101	Charlee Bezilla	Seats (Total: 20)
	MWF 10:00am - 10:50am	JMZ 3120
0201	Madeline Muravchik	Seats (Total: 20)
	MWF 11:00am - 11:50am	JMZ 3120

FREN302 Translation: French to English

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department.

Practicum in translation primarily from French to English; contrastive analysis.

0101	Erica Cefalo	Seats (Total: 20)
	MWF 1:00pm - 1:50pm	JMZ 2120

FREN306 Commercial French I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department.

Introduction to commercial French including correspondence and business terminology. Emphasis on cross-cultural concepts needed for successful interaction within business settings. Taught in French.

Contact department for information to register for this course.

FREN311 Advanced Oral Expression

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: FREN250; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a native/fluent speaker of French.

Linguistic and thematic analysis of written, audio, and visual texts. Focus on aural and oral skills. Some written assignments and evaluation.

Contact department for information to register for this course.

FREN312 France Today

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a native/fluent speaker of French.

Analysis and discussion of current events and institutions using various French media resources.

0101	Sarah Benharrech	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	JMZ 3203

FREN351 From Romanticism to the Age of Modernism and Beyond

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department.

A survey of the chief authors and major movements of French literature from Pre-Romanticism to the present.

Jointly offered with FREN 351H.

0101	Caroline Eades	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	JMZ 2122

FREN351H From Romanticism to the Age of Modernism and Beyond

(Perm req) Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department.

A survey of the chief authors and major movements of French literature from Pre-Romanticism to the present.

Cross-listed with FREN351.

0101	Caroline Eades	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	JMZ 2122

FREN352 From the Age of Epic and Romance to the Enlightenment

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: FREN301; or students who have taken courses with comparable content may contact the department.

A survey of the chief authors and major movements of French literature from the Middle Ages to the end of the 18th century.

Contact department for information to register for this course.

FREN369F Special Topics in Study Abroad III; Third Year French I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

FREN369G Special Topics in Study Abroad III; Third-Year French II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

FREN369Y Special Topics in Study Abroad III; Fourth-Year French I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

FREN386 Experiential Learning

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Prerequisite: Permission of ARHU-School of Languages, Literatures, and Cultures department.

Restriction: Junior standing or higher.

Contact department for information to register for this course.

FREN387 Critical Writing on France and the French-Speaking World

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: FREN301. Restriction: Not open to Native speakers.

Intensive writing course based on focused study of issues and concerns drawn from French and Francophone literatures, films, and cultures. Elements of style, review of grammar. Taught in French.

0101	Erica Cefalo	Seats (Total: 20)
	MW 3:30pm - 4:45pm	JMZ 2207

FREN399 Directed Study in French

(Perm req)

Credits: 1-3 Grading Method: Regular

Advanced undergraduates develop syllabus, reading list, and course requirements with interested faculty member. Designed for in-depth study of material not offered in regular courses or as expansion of course material. To be planned during semester preceding registration.

Supervised work under professor of student's choice with permission of instructor. Contact department for details.

Contact department for information to register for this course.

FREN399A Directed Study in French

Credits: 3 Grading Method: Regular

Advanced undergraduates develop syllabus, reading list, and course requirements with interested faculty member. Designed for in-depth study of material not offered in regular courses or as expansion of course material. To be planned during semester preceding registration.

Contact department for information to register for this course.

FREN407 History of the French Language

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: FREN351 or FREN352; or permission of ARHU-French & Italian Languages & Literatures department.

Evolution of the French language from Latin to modern French. Taught in French.

Jointly offered with FREN601. Credit granted for FREN407 or FREN601.

0101	Mary Ellen Scullen	Seats (Total: 20)
	Tu 5:00pm - 7:30pm	JMZ 1122

FREN495H Honors Thesis Research

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be admitted to the departmental honors program.

The writing of a paper under the direction of a professor in this department and an oral examination. Required to fulfill the departmental honors requirement.

Contact department for information to register for this course.

FREN499 Special Topics in French Studies

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An aspect of French studies, the specific topic to be announced each time the course is offered.

Contact department for information to register for this course.

FREN499A Special Topics in French Studies; French Cinema: A Cultural Approach

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An aspect of French studies, the specific topic to be announced each time the course is offered.

Cross-listed with FILM429P. Credit granted for FREN499A or FILM429P. Taught in French.

0101	Caroline Eades	Seats (Total: 25)
	TuTh 3:30pm - 4:45pm	JMZ 0208

FREN499C Special Topics in French Studies; Youth, Identity, Nation: A Survey of Quebec Cinema

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An aspect of French studies, the specific topic to be announced each time the course is offered.

Cross-listed with FILM429K. Credit granted for FREN499C or FILM429K. Taught in English.

0101	Mercedes Baillargeon	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	JMZ 2206

FREN499X Special Topics in French Studies; Directed Study in French

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An aspect of French studies, the specific topic to be announced each time the course is offered.

Contact department for information to register for this course.

FREN601 The History of the French Language

Credits: 3 Grading Method: Regular,
Audit

Jointly offered with FREN407. Credit granted for FREN601 or FREN407.

0101	Mary Ellen Scullen	Seats (Total: 20)
	Tu 5:00pm - 7:30pm	JMZ 1122

FREN699V Seminar; Ecocritical Approach to French Enlightenment Literature

Credits: 3 Grading Method: Regular,
Audit

Topic to be determined each semester.

An Introduction to Ecocriticism with an in-depth examination of 18th-century French literary works questioning human interactions with natural environments. Taught in French.

0101	Sarah Benharrech	Seats (Total: 10)
	Th 4:30pm - 7:15pm	JMZ 2125

FREN709 College Teaching of French

Credits: 1 Grading Method: Sat-Fail

Introduction to the teaching of French at the college level with particular emphasis on methodology. Seminars in theory, demonstration of different teaching techniques, supervised practice teaching, training in language laboratory procedures, evaluation of instructional materials. Required of all graduate assistants in French.

0101	Mary Ellen Scullen	Seats (Total: 5)
Contact instructor or department for details.		

FREN798 Master's Independent Study

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

Contact department for information to register for this course.

FREN799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

FREN889 Doctoral Independent Study

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Contact department for information to register for this course.

FREN898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

FREN899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

GEMS Gemstone

Fall 2019

GEMS100 Freshman Honors Colloquium: Introduction to Gemstone

Credits: 1 Grading Method: Regular

Restriction: Freshman standing; and must be in the Gemstone program.

Orienting new Gemstone students to the university and to the program through a variety of team building activities, resources, and skill exploration exercises. Students will also examine and discuss areas such as liberal education, diversity, service, arts, current events, academic integrity, and leadership style.

These classes are scheduled in the Ellicott building.

0101	Leah Kreimer Tobin Tu 11:00am - 12:15pm	Seats (Total: 9) ELL 0100A
0102	Leah Kreimer Tobin Tu 2:00pm - 3:15pm	Seats (Total: 9) ELL 0100B
0103	Leah Kreimer Tobin Tu 3:45pm - 5:00pm	Seats (Total: 9) ELL 0100A
0104	Leah Kreimer Tobin W 10:00am - 11:15am	Seats (Total: 9) ELL 0102
0105	Leah Kreimer Tobin W 12:30pm - 1:45pm	Seats (Total: 9) ELL 0102
0106	Leah Kreimer Tobin W 3:30pm - 4:45pm	Seats (Total: 9) ELL 0100A
0107	Leah Kreimer Tobin W 4:45pm - 6:00pm	Seats (Total: 9) ELL 0100B
0108	Leah Kreimer Tobin Th 9:30am - 10:45am	Seats (Total: 9) ELL 0100B
0109	Leah Kreimer Tobin Th 12:30pm - 1:45pm	Seats (Total: 10) ELL 0100A
0110	Leah Kreimer Tobin Th 4:30pm - 5:45pm	Seats (Total: 10) ELL 0100A
0111	Leah Kreimer Tobin Th 5:00pm - 6:15pm	Seats (Total: 9) ELL 0102
0112	Leah Kreimer Tobin F 10:30am - 11:45am	Seats (Total: 9) ELL 0102
0113	Leah Kreimer Tobin F 1:30pm - 2:45pm	Seats (Total: 9) ELL 0100B
0114	Leah Kreimer Tobin Contact instructor or department for details.	Seats (Total: 1)

GEMS202 Team Dynamics and Research Methodology

Credits: 2

Grading Method: Regular

General Education: DSSP

Prerequisite: GEMS100, GEMS102, and GEMS104. Corequisite: GEMS296. Restriction: Must be in the Gemstone program; and sophomore standing or higher.

This experiential course is designed to foster an understanding of effective team dynamics and basic research methodology. It will teach skills applicable to Gemstone team research and the writing of a team thesis. Upperclass Gemstone students serve as discussion facilitators. Students participate in their Gemstone teams and develop a draft of their team thesis proposal.

0101	Kristan Skendall, Frank Coale	Seats (Total: 168)
	Tu 5:00pm - 6:30pm	EGR 1202
	Contact instructor or department for details.	

GEMS208A Special Topics in Leadership and Team Development; Team Dynamics and Research Methodology: First Time Section Leader

Credits: 1-3

Grading Method: Regular

Principles, methods and types of leadership and team development with an emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

Restriction: Must be in the Gemstone program.

0101	Kristan Skendall	Seats (Total: 14)
	Contact instructor or department for details.	

GEMS208B Special Topics in Leadership and Team Development; Team Dynamics and Research Methodology: Returner Section Leader

Credits: 1-3

Grading Method: Regular

Principles, methods and types of leadership and team development with an emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

Restriction: Must be in the Gemstone program.

0101	Kristan Skendall	Seats (Total: 14)
	Contact instructor or department for details.	

GEMS208C**Special Topics in Leadership and Team Development; Introduction to Gemstone: First Time Section Leader**

Credits: 1-3

Grading Method: Regular,
Audit

Principles, methods and types of leadership and team development with an emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

Restriction: Must be in the Gemstone program. These classes are scheduled in the Ellicott building.

0101	Kristan Skendall, Leah Kreimer Tobin	Seats (Total: 23)
Contact instructor or department for details.		

GEMS208D**Special Topics in Leadership and Team Development; Introduction to Gemstone: Returner Section Leader**

Credits: 1-3

Grading Method: Regular,
Audit

Principles, methods and types of leadership and team development with an emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

Restriction: Must be in the Gemstone program. These classes are scheduled in the Ellicott building.

0101	Kristan Skendall, Leah Kreimer Tobin	Seats (Total: 10)
Contact instructor or department for details.		

GEMS208E**Special Topics in Leadership and Team Development; GEMS Connect**

Credits: 1-3

Grading Method: Regular,
Audit

Principles, methods and types of leadership and team development with an emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

Restriction: Must be in the Gemstone program.

0101	Jessica Lee	Seats (Total: 30)
Contact instructor or department for details.		

GEMS208L**Special Topics in Leadership and Team Development; GEMS GSC Executive Board**

Credits: 1-3 Grading Method: Regular,
Audit

Principles, methods and types of leadership and team development with an emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

0101	Jessica Lee	Seats (Total: 6)
Contact instructor or department for details.		

GEMS208M Special Topics in Leadership and Team Development; AMPP: The Gemstone Alumni Mentor & Partner Program

Credits: 1-3 Grading Method: Regular,
Audit

Principles, methods and types of leadership and team development with an emphasis on group discussion and decision making. Reading, discussion and exploration of the basic team concept, communications for winning scenarios, goal setting, problem solving, conflict resolution and research methods.

0101	Leah Kreimer Tobin	Seats (Total: 100)
Contact instructor or department for details.		

GEMS296 Team Project Seminar I

Credits: 1 Grading Method: Regular

Prerequisite: GEMS100, GEMS102, and GEMS104. Corequisite: GEMS202. Restriction: Must be in the Gemstone program with sophomore standing in a research team.

This is the first of six seminars during which Gemstone students carry out multidisciplinary research with the guidance of a faculty mentor. The teams develop their working relationship, start their literature search, define their research question, and set short & long term goals.

0101	J Carson Smith	Seats (Total: 14)
	Tu 3:30pm - 5:00pm	Location: TBA
Contact instructor or department for details.		
0102	Steven Mitchell	Seats (Total: 14)
	W 8:00am - 8:50am	EGR 2162
	Tu 6:45pm - 7:50pm	ESJ 1309
0103	Kan Cao	Seats (Total: 14)
	M 6:00pm - 6:50pm	EGR 2116

0104	Mona Mittal Tu 6:30pm - 7:30pm Su 8:00am - 8:50am	Seats (Total: 14) Location: TBA Location: TBA
0105	Stephanie Yarwood M 5:00pm - 5:50pm Tu 6:40pm - 7:30pm	Seats (Total: 14) ANS 1420 ESJ B0322
0106	Siddhartha Das M 5:00pm - 5:50pm W 5:30pm - 6:30pm	Seats (Total: 14) EGR 0159 Location: TBA
0107	Pierre-Emmanuel Jabin W 5:00pm - 5:50pm Tu 6:40pm - 7:30pm	Seats (Total: 14) CSI 4120 BPS 1232
0108	John Baras M 6:15pm - 7:15pm Tu 6:30pm - 7:30pm	Seats (Total: 14) Location: TBA Location: TBA
0109	Mohamad Al-Sheikhly W 8:00am - 8:50am Tu 6:40pm - 7:30pm	Seats (Total: 14) CHE 2116 SYM 0209
0110	Romel Gomez W 6:00pm - 6:50pm M 6:15pm - 7:15pm	Seats (Total: 14) Location: TBA ESJ B0322
0111	Anil Deane W 6:00pm - 6:50pm Tu 7:00pm - 7:50pm	Seats (Total: 14) ATL 4301 HBK 0108
0112	Rodolphe Gentili Contact instructor or department for details.	Seats (Total: 14)
0113	Kristan Skendall Contact instructor or department for details.	Seats (Total: 5)

GEMS297

Team Project Seminar II

Credits: 2

Grading Method: Regular

Restriction: Must be in the Gemstone program with sophomore standing in a research team.

This is the second of six seminars during which Gemstone students carry out interdisciplinary research with the guidance of a faculty mentor. The team develops its website, prepares and presents its research proposal and begins its research project.

0113	Kristan Skendall	Seats (Total: 5)
	Contact instructor or department for details.	

GEMS396

Team Project Seminar III

Credits: 2 Grading Method: Regular

Prerequisite: GEMS297. Restriction: Must be in the Gemstone program with junior standing in a research team.

This is the third of six seminars during which Gemstone students carry out interdisciplinary research with the guidance of a faculty mentor. The team presents its progress at the Gemstone Colloquia.

0101	Nishanth Sunny	Seats (Total: 14)
	Tu 8:00am - 8:50am	ESJ B0322
	Th 3:30pm - 4:20pm	ESJ B0322
0102	Anil Deane	Seats (Total: 14)
	M 5:00pm - 5:50pm	ATL 4301
	W 5:00pm - 5:50pm	ATL 4364
0103	Natasha Almeida e Andrade	Seats (Total: 14)
	F 1:00pm - 1:50pm	EGR 1179
	Tu 5:00pm - 5:50pm	MTH 0409
0104	Giuliano Scarcelli	Seats (Total: 14)
	Tu 6:30pm - 7:30pm	AJC 3104
	F 4:30pm - 5:30pm	AJC 3104
0105	Kenneth Frauwirth	Seats (Total: 14)
	Su 9:00am - 9:50am	Location: TBA
	Th 5:30pm - 6:30pm	ESJ 1309
0106	Bryan Quinn	Seats (Total: 14)
	W 5:00pm - 5:50pm	AVW 1318
	Tu 3:30pm - 4:20pm	Location: TBA
0107	David Akin, Mary Bowden	Seats (Total: 14)
	W 5:00pm - 5:50pm	Location: TBA
	Th 6:15pm - 7:15pm	JMZ 1103

0108	Doug Lombardi M 7:00pm - 7:50pm Th 4:00pm - 4:50pm	Seats (Total: 14) ESJ B0320 PLS 1162
0109	Jae Kun Shim W 1:00pm - 1:50pm Tu 8:00pm - 8:50pm	Seats (Total: 14) SPH 0110F Location: TBA
0110	Birthe Kjellerup M 5:00pm - 5:50pm Tu 3:30pm - 4:30pm Th 12:30pm - 1:30pm	Seats (Total: 14) ESJ B0320 EGR 1179 EGR 1179
0111	Soheil Feizi F 12:00pm - 12:50pm M 6:30pm - 7:30pm	Seats (Total: 14) AVW 3258 ESJ 1215
0112	Omar Ayyub, Peter Kofinas M 8:00am - 8:50am Th 8:00am - 8:50am	Seats (Total: 14) KEB 1200 MTH 0101
0113	Kristan Skendall Contact instructor or department for details.	Seats (Total: 5)

GEMS397

Team Project Seminar IV

Credits: 2 Grading Method: Regular

Prerequisite: GEMS396. Restriction: Must be in the Gemstone program with junior standing in a research team.

This is the fourth of six seminars during which Gemstone students carry out interdisciplinary research with the guidance of a faculty mentor. The team further develops its website. Also they will prepare and present the team project in the poster session of Undergraduate Research Day.

0113	Kristan Skendall Contact instructor or department for details.	Seats (Total: 5)
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GEMS496

Project Writing Seminar

Credits: 2 Grading Method: Regular

Prerequisite: GEMS397. Restriction: Must be in the Gemstone program.

This is the fifth of six seminars during which Gemstone students carry out research with the guidance of a faculty mentor. The team finishes the analysis of their data and writes and edits its team thesis.

0101	Matthias Zwicker TuF 8:00am - 8:50am	Seats (Total: 14) Location: TBA
0102	Kevin Knapstein M 10:00am - 10:50am W 5:00pm - 5:50pm	Seats (Total: 14) Location: TBA Location: TBA
0103	Mohamad Al-Sheikhly M 9:00am - 9:50am W 6:30pm - 7:45pm	Seats (Total: 14) Location: TBA Location: TBA
0104	Jose Aranda-Espinoza Tu 8:00am - 8:50am F 6:00pm - 6:50pm	Seats (Total: 14) JMZ 1122 AJC 3104
0105	Joanna Goger W 1:00pm - 1:50pm M 1:00pm - 1:50pm	Seats (Total: 14) SYM 0215 HBK 0108
0106	Bao Yang Th 8:00am - 8:50am M 7:00pm - 7:50pm	Seats (Total: 14) EGR 0159 EGR 0159
0107	Ashok Agrawala Tu 12:30pm - 1:30pm W 5:00pm - 5:50pm	Seats (Total: 14) IRB 5105 IRB 5105
0108	Margret Bjarnadottir W 3:00pm - 3:50pm F 12:00pm - 12:50pm	Seats (Total: 14) Location: TBA IRB 2207
0109	Anil Deane M 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 14) ATL 4301 ATL 4364
0110	Lester Schultheis M 9:00am - 9:50am M 9:00pm - 9:50pm	Seats (Total: 14) JMZ 2122 JMZ 2122

0111	David Akin	Seats (Total: 14)
	W 3:15pm - 4:15pm	Location: TBA
	M 7:00pm - 7:50pm	Location: TBA
0113	Kristan Skendall	Seats (Total: 3)
	Contact instructor or department for details.	

GEMS497

Team Thesis Defense

Credits: 2

Grading Method: Regular

General Education: DSSP

Prerequisite: GEMS396. Restriction: Must be in the Gemstone program.

Gemstone teams will complete the team research project and thesis. The team will formally present the thesis to experts in the area of interest at a Team Thesis Conference before final submission.

0113	Kristan Skendall	Seats (Total: 5)
	Contact instructor or department for details.	

GEOG Geographical Sciences

Fall 2019

GEOG100

Introduction to Geography

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: SB

General Education: DSHS

An introduction to the broad field of geography as it is applicable to the general education student. The course presents the basic rationale of variations in human occupancy of the earth and stresses geographic concepts relevant to understanding world, regional and local issues.

0101	Keith Yearwood	Seats (Total: 25)
	MW 12:00pm - 12:50pm	LEF 2205
	Th 9:30am - 10:20am	WDS 0104 Discussion
0102	Keith Yearwood	Seats (Total: 25)
	MW 12:00pm - 12:50pm	LEF 2205
	Th 11:00am - 11:50am	EGR 3102 Discussion

GEOG110

The World Today: Global Perspectives

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHS,
DVUP

The most critical issue facing the world today is the sustainability of both human and physical systems in the 21st century. This class uses the context of regions of the world to explore the 21st century issues of climate change, development, politics, economy, and demography. Each region will be used to highlight aspects of sustainability.

FC01	Rachel Berndtson	Seats (Total: 36)
	MW 4:30pm - 5:45pm	KEY 0116
<i>Restricted to students in Freshmen Connection.</i>		

GEOG130

Developing Countries

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB, D General Education: DSHS, DSSP

An introduction to the geographic characteristics of the development problems and prospects of developing countries. Spatial distribution of poverty, employment, migration and urban growth, agricultural productivity, rural development, policies and international trade. Portraits of selected developing countries.

0201	Allison Baer, Rachel Lamb	Seats (Total: 25)
	MW 11:00am - 11:50am	LEF 2205
	F 9:00am - 9:50am	LEF 1201 Discussion
0202	Allison Baer, Rachel Lamb	Seats (Total: 25)
	MW 11:00am - 11:50am	LEF 2205
	Th 9:30am - 10:20am	LEF 1220 Discussion
0203	Allison Baer, Rachel Lamb	Seats (Total: 25)
	MW 11:00am - 11:50am	LEF 2205
	Th 9:30am - 10:20am	LEF 1201 Discussion
0204	Allison Baer, Rachel Lamb	Seats (Total: 24)
	MW 11:00am - 11:50am	LEF 2205
	Th 11:00am - 11:50am	LEF 1171 Discussion
0205	Allison Baer, Rachel Lamb	Seats (Total: 25)
	MW 11:00am - 11:50am	LEF 2205
	Th 11:00am - 11:50am	MTH B0425 Discussion
0206	Allison Baer, Rachel Lamb	Seats (Total: 25)
	MW 11:00am - 11:50am	LEF 2205
	F 10:00am - 10:50am	LEF 0135 Discussion

0208	Rachel Lamb, Allison Baer	Seats (Total: 25)	
	MW 11:00am - 11:50am	LEF 2205	
	F 10:00am - 10:50am	HBK 0125	Discussion
FC01	Allison Baer	Seats (Total: 60)	
	TuTh 4:30pm - 5:45pm	MMH 1400	
	<i>Restricted to students in Freshmen Connection.</i>		

GEOG140

Natural Disasters: Earthquakes, Floods, and Fires

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSNS, SCIS

Catastrophic Environmental Events (CCE) that are becoming more common in this time of global environmental change and it is essential that today's students be equipped with the knowledge and skills to be leaders as we, as a society, understand the upheaval that these CCEs are causing. Students will examine how CCEs shape human society and ecosystem from the interdisciplinary perspective afforded by the field of Geography. Students will use the latest geographic science concepts and techniques in exploring these events. Using satellite imagery they will gain a multi-scale perspective of the ecological and societal aspects of the events.

0101	Keith Yearwood	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	LEF 2205	
	F 9:00am - 9:50am	JMZ 3120	Discussion
0102	Keith Yearwood	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	LEF 2205	
	F 10:00am - 10:50am	LEF 1201	Discussion
0103	Keith Yearwood	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	LEF 2205	
	Th 11:00am - 11:50am	WDS 0104	Discussion
0104	Keith Yearwood	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	LEF 2205	
	F 11:00am - 11:50am	LEF 1201	Discussion
0105	Keith Yearwood	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	LEF 2205	
	Th 9:30am - 10:20am	KNI 1105	Discussion

0106	Keith Yearwood	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	LEF 2205	
	Th 9:30am - 10:20am	JMZ 3205	Discussion
FC01	Keith Yearwood	Seats (Total: 40)	
	MW 6:00pm - 7:15pm	LEF 2166	
	<i>Restricted to students in Freshmen Connection.</i>		

GEOG170

Mapping our Digital World

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: MS General Education: DSNS

Introduction to technical methods used in gathering, analyzing, and mapping geospatial information for applications such as urban mobility, environmental monitoring, situational awareness, and disaster management. Topics include Geographic Information Systems (GIS), cartography, map projections, satellite and airborne remote sensing, the global positioning system (GPS), and introductory statistics and probability. The course is a gateway to more advanced technical classes in geospatial science.

0101	Micah Brachman	Seats (Total: 240)	
	TuTh 2:00pm - 3:15pm	LEF 2205	
FC01	Annaly Galeas	Seats (Total: 28)	
	TuTh 7:30pm - 8:45pm	LEF 1201	
	<i>Restricted to students in Freshmen Connection.</i>		

GEOG201

Geography of Environmental Systems

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSNL (if taken with GEOG211)

A systematic introduction to the processes and associated forms of the atmosphere and earth's surfaces emphasizing the interaction between climatology, hydrology and geomorphology.

0101	Laura Duncanson	Seats (Total: 240)	
	TuTh 9:30am - 10:45am	KEY 0106	

GEOG211

Geography of Environmental Systems Laboratory

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in GEOL120, GEOL100, or GEOG201.

A laboratory course to accompany GEOG 201. Analysis of the components of the earth's energy balance using basic instrumentation; weather map interpretation; soil analysis; the application of map and air photo interpretation techniques to landform analysis.

This is a 2 hr, 1 credit lab which parallels GEOG 201; Required for GEOG majors; optional for non-majors.

0101	Carrie Lewey	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	Lab
0201	Carrie Lewey	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	Lab
0301	Carrie Lewey	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	Lab
0401	Carrie Lewey	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	Lab
0501	Carrie Lewey	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	Lab
0601	Carrie Lewey	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	Lab
0701	Carrie Lewey	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	Lab
0801	Carrie Lewey	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	Lab
0901	Carrie Lewey	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	Lab
1001	Carrie Lewey	Seats (Total: 24)	
	Class time/details on ELMs	ONLINE	Lab

GEOG306

Introduction to Quantitative Methods for the Geographic Environmental Sciences

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: FSAR

Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Essentials in the quantitative analysis of spatial and other data, with a particular emphasis on statistics and programming. Topics include data display, data description and summary, statistical inference and significance tests, analysis of variance, correlation, regression, and some advanced concepts, such as matrix methods, principal component analysis, and spatial statistics. Students will develop expertise in data analysis using advanced statistical software.

Students must pay a \$40.00 laboratory materials fee.

0101	Naijun Zhou	Seats (Total: 25)		
	MW 9:00am - 9:50am	TYD 2109		
	F 9:00am - 10:50am	LEF 1138	Lab	
0102	Naijun Zhou	Seats (Total: 25)		
	MW 9:00am - 9:50am	TYD 2109		
	Th 1:00pm - 2:50pm	LEF 1138	Lab	
<i>Restriction: Open to GEOG, GIS, & ENSP-Coastal, Land Use, Global majors only.</i>				

GEOG330

As the World Turns: Society and Sustainability in a Time of Great Change

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, DVUP, SCIS

Credit only granted for: GEOG330, GEOG360, or GEOG362. Formerly: GEOG362.

Cultural geography course on society and sustainability. Culture is the basic building block that is key to sustainability of societies. Course will cover sustainability of societies on different scales, examining local, regional, and worldwide issues. Sustainability will be examined as a key element of environmental sustainability. How societies adjust to rapid world change will be examined as a positive and/or negative factor in sustainability.

0101	Rachel Berndtson	Seats (Total: 25)		
	MW 1:00pm - 1:50pm	ESJ 1224		
	F 2:00pm - 2:50pm	AJC 2119	Discussion	
0102	Rachel Berndtson	Seats (Total: 25)		
	MW 1:00pm - 1:50pm	ESJ 1224		
	F 9:00am - 9:50am	IRB 1207	Discussion	

0103	Rachel Berndtson	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	ESJ 1224	
	F 11:00am - 11:50am	IRB 2207	Discussion
0104	Rachel Berndtson	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	ESJ 1224	
	F 12:00pm - 12:50pm	ESJ 1309	Discussion
0105	Rachel Berndtson	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	ESJ 1224	
	F 10:00am - 10:50am	ESJ 1309	Discussion
0106	Rachel Berndtson	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	ESJ 1224	
	F 1:00pm - 1:50pm	ESJ 1309	Discussion

GEOG332

Economic Geography

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: GEOG203, GEOG303, or GEOG332. Formerly: GEOG303.

Principles of managing scarce resources in a world where everyone faces tradeoffs across both time and space. Focuses on the relationship between globalization processes and changing patterns of locational advantages, production, trade, population, socioeconomic and environmental grace and sustainability.

0101	Julie Silva	Seats (Total: 25)	
	MW 2:00pm - 2:50pm	TYD 2106	
	F 10:00am - 10:50am	EGR 2116	Discussion
0102	Julie Silva	Seats (Total: 25)	
	MW 2:00pm - 2:50pm	TYD 2106	
	F 12:00pm - 12:50pm	LEF 1201	Discussion

GEOG372

Remote Sensing

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Principles of remote sensing in relation to photographic, thermal infrared and radar imaging. Methods of obtaining quantitative information from remotely-sensed images. Interpretation of remotely-sensed images emphasizing the study of spatial and environmental relationships.

Students must pay a \$40.00 laboratory materials fee.

0101	Sergii Skakun TuTh 9:30am - 10:45am F 11:00am - 12:50pm	Seats (Total: 25) SQH 1120 LEF 1136	Lab
0102	Sergii Skakun TuTh 9:30am - 10:45am F 11:00am - 12:50pm <i>Restriction: Open to GEOG, GIS, & ENSP-Coastal, Land Use, Global majors only.</i>	Seats (Total: 25) SQH 1120 LEF 1138	Lab
0103	Sergii Skakun TuTh 9:30am - 10:45am Th 11:00am - 12:50pm	Seats (Total: 25) SQH 1120 LEF 1136	Lab
0104	Sergii Skakun TuTh 9:30am - 10:45am Th 11:00am - 12:50pm	Seats (Total: 25) SQH 1120 LEF 1138	Lab

GEOG373

Geographic Information Systems

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Characteristics and organization of geographic data; creation and use of digital geospatial databases; metadata; spatial data models for thematic mapping and map analysis; use of geographic information system in society, government, and business. Practical training with use of advanced software and geographic databases.

Students must pay a \$40.00 laboratory materials fee.

0101	Naijun Zhou MW 10:00am - 10:50am Th 1:00pm - 2:50pm <i>Restriction: Open to GEOG, GIS, & ENSP-Coastal, Land Use, Global majors only.</i>	Seats (Total: 25) TYD 2109 LEF 1136	Lab
0102	Naijun Zhou MW 10:00am - 10:50am F 1:00pm - 2:50pm	Seats (Total: 25) TYD 2109 LEF 1136	Lab
0103	Naijun Zhou MW 10:00am - 10:50am F 3:00pm - 4:50pm	Seats (Total: 25) TYD 2109 LEF 1136	Lab

GEOG384 Internship in Geography I

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: GEOG211, GEOG306, GEOG212, and GEOG201; and (ENGL393 or ENGL390).

Restriction: Must be in Geography program.

Supervised field training to provide career experience. Introduction to professional level activities, demands, opportunities. Placement at a public agency, non-profit organization, or private firm. Participation requires application to the internship advisor in preceding semester.

0101	Keith Yearwood	Seats (Total: 25)
Contact instructor or department for details.		

GEOG384H Internship in Geography I

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: GEOG211, GEOG306, GEOG212, and GEOG201; and (ENGL393 or ENGL390).

Restriction: Must be in Geography program.

Supervised field training to provide career experience. Introduction to professional level activities, demands, opportunities. Placement at a public agency, non-profit organization, or private firm. Participation requires application to the internship advisor in preceding semester.

0101	Keith Yearwood	Seats (Total: 10)
Contact instructor or department for details.		

GEOG385 Internship in Geography II

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GEOG211, GEOG306, GEOG212, and GEOG201; and must have completed a Junior (Professional) English course. Restriction: Must be in Geography program.

Supervised field training to provide career experience. Introduction to professional-level activities, demands, opportunities. Placement at a public agency, nonprofit organization, or private firm. Participation requires application to the internship advisor in preceding semester.

0101	Keith Yearwood	Seats (Total: 25)
Contact instructor or department for details.		

GEOG385H Internship in Geography II

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GEOG211, GEOG306, GEOG212, and GEOG201; and must have completed a Junior (Professional) English course. Restriction: Must be in Geography program.

Supervised field training to provide career experience. Introduction to professional-level activities, demands, opportunities. Placement at a public agency, nonprofit organization, or private firm. Participation requires application to the internship advisor in preceding semester.

0101	Keith Yearwood	Seats (Total: 10)
Contact instructor or department for details.		

GEOG398

Special Topics in Geography

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

An introductory course dealing with special topics in geography.

Contact department for information to register for this course.

GEOG398H

Special Topics in Geography

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

An introductory course dealing with special topics in geography.

0101	Instructor: TBA	Seats (Total: 1)
Contact instructor or department for details.		

GEOG417

Land Cover Characterization Using Multi-Spectral Remotely Sensed Data Sets

Credits: 3

Grading Method: Regular

Prerequisite: Permission of BSOS-Geography department. Or GEOG372; and GEOG472; and GEOG306. Jointly offered with GEOG617. Credit only granted for: GEOG498R; GEOG788R; GEOG417; GEOG617. Formerly: GEOG498R.

Students will be introduced to the image processing steps required for characterizing land cover extent and change. Key components of land cover characterization, including image interpretation, algorithm implementation, feature space selection, thematic output definition, and scripting will be discussed and implemented.

0101	Matthew Hansen	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	LEF 1158
	W 12:00pm - 1:50pm	LEF 1138 Lab

GEOG423**Latin America**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Permission of BSOS-Geography department. Or GEOG201 and GEOG202; and (GEOG332, GEOG435, or GEOG333). Recommended: GEOG130 and GEOG110. Credit only granted for: GEOG313 or GEOG423. Formerly: GEOG313.

A geography of Latin America and the Caribbean in the contemporary world: political and cultural regions, population and natural resource distribution, economic and social development, poverty, crime, urbanization, migration trends, and natural disasters.

0101	Anand Sharma	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	LEF 1158

GEOG431**Culture and Natural Resource Management**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: GEOG421 or GEOG431. Formerly: GEOG421.

Basic issues concerning the natural history of humans from the perspective of the geographer. Basic components of selected behavioral and natural systems, their evolution and adaptation, and survival strategies.

0101	Kuishuang Feng	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	LEF 1201

GEOG432**Spatial Econometrics**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Permission of BSOS-Geography department. Or GEOG201; and GEOG202; and GEOG306; and GEOG332. Jointly offered with GEOG732. Credit only granted for: GEOG498E, GEOG432, GEOG788E, GEOG732. Formerly: GEOG498E.

An introduction to modern econometric techniques in general and spatial econometrics in particular, using the popular open source statistical computer language R. A focus on using statistical computing to produce analytical reports for real-world applications, research papers, and dissertations.

0101	Laixiang Sun	Seats (Total: 24)
	Tu 3:30pm - 6:00pm	LEF 1171

Biogeography and Environmental Change

Prerequisite: GEOG301. And GEOG201 and GEOG211; or permission of BSOS-Geography department. Jointly offered with GEOG642. Credit only granted for: GEOG642, GEOG442, GEOG447, or GEOG484. Formerly: GEOG4 47.

0101	George Hurtt	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	LEF 1158

Computer Cartography

Prerequisite: GEOG373 and GEOG306. Credit only granted for: GEOG471 or GEOG475. Formerly: GEOG471.

Students must pay a \$40.00 laboratory materials fee.

0101	Kathleen Stewart	Seats (Total: 25)	
	MW 3:00pm - 3:50pm	TYD 0117	
	F 9:00am - 10:50am	LEF 1136	Lab
0102	Kathleen Stewart	Seats (Total: 25)	
	MW 3:00pm - 3:50pm	TYD 0117	
	F 1:00pm - 2:50pm	LEF 1138	Lab
	<i>Restriction: Open to GEOG, GIS, & ENSP-Coastal, Land Use, Global majors only.</i>		

Object-Oriented Computer Programming for GIS

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GEOG373 and GEOG376; or permission of BSOS-Geography department. And must have completed MATH220; or must have completed or be concurrently enrolled in MATH120, MATH130, or MATH140. Restriction: Must be in Geography program; or must be in GIS minor.

Expands on conceptual and practical aspects of programming for geographic applications. The main focus of this course is to provide students more advanced programming in object oriented programming languages (i.e. Python). In addition, students will develop a proficiency in applying these advanced programming principles to manipulating spatial data sources within the Geographic Information Systems (GIS).

Students must pay a \$40.00 laboratory materials fee.

0101	Junchuan Fan	Seats (Total: 25)
	MW 9:00am - 9:50am	LEF 1220
	W 10:00am - 11:50am	LEF 1138 Lab
<i>Restriction: Open to GEOG, GIS, & ENSP-Coastal, Land Use, Global majors only; or must be a GIS minor.</i>		

GEOG498

Topical Investigations

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Independent study under individual guidance.

Contact department for information to register for this course.

GEOG498G

Topical Investigations; Models and Methods for Spatial Data Science

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Independent study under individual guidance.

Introduces a spatial data science (SDS) framework for uncovering spatial patterns and understanding spatial processes, whether they are generated by humans, the physical environment, or a combination thereof. This course first covers some basic principles of popular computational tools for SDS and then surveys a variety of geographic conceptual models and quantitative methods from the traditions of spatial analysis and spatial statistics. A strong emphasis is placed on the practical deployment of these models and methods and their interpretation. Students will develop expertise in common design decisions, analytical intuition, and limitations of SDS through real world examples and applied projects, as well as build their repertoire of Python programming skills for obtaining, processing, and analyzing spatial data.

0101	Taylor Oshan	Seats (Total: 18)
	MW 10:00am - 10:50am	LEF 1158
	Th 9:00am - 10:50am	LEF 1136 Lab

GEOG601 The Nature and Practice of Science

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of BSOS-Geography department. Credit only granted for: GEOG601 or GEOG788N. Formerly: GEOG788N.

Introduces students to the nature and practice of science in physical and human geography, including practical methods for research productivity, professional, societal and ethical obligations of scientists, the philosophy of science, and the scientific literature. Students will prepare and critically evaluate research proposals.

0101	Tatiana Loboda	Seats (Total: 24)
	M 3:00pm - 5:30pm	LEF 1171

GEOG603 Masters Research Tutorial

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: GEOG600. Restriction: Permission of BSOS-Geography department. Credit only granted for: GEOG603 or GEOG610. Formerly: GEOG610.

Development of Masters scholarly paper topic, critical literature review, formulation of geographical approach to research methodology. Individual meetings with faculty. Comprehensive exam before the end of the semester.

Contact department for information to register for this course.

GEOG606 Quantitative Spatial Analysis

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: GEOG305; or permission of BSOS-Geography department. Credit only granted for: GEOG605 or GEOG606. Formerly: GEOG605.

Multivariate statistical method applications to spatial problems. Linear and non-linear correlation and regression, factor analysis, cluster analysis. Spatial statistics including: trend surfaces, sequences, point distributions. Applications orientation.

0101	Giovanni Baiocchi	Seats (Total: 25)
	Tu 3:30pm - 6:00pm	LEF 1158

GEOG608 Comprehensive Portfolio Assessment Summary

Credits: 1-3 Grading Method: Sat-Fail

Evaluation of a PhD student's portfolio.

Contact department for information to register for this course.

GEOG617 Land Cover Characterization Using Multi-Spectral Remotely Sensed Data Sets

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Permission of BSOS-Geography department. Or GEOG372; and GEOG472; and GEOG306. Jointly offered with GEOG417. Credit only granted for: GEOG498R, GEOG788R, GEOG417, or GEOG617. Formerly: GEOG788R.

Students will be introduced to the image processing steps required for characterizing land cover extent and change. Key components of land cover characterization, including image interpretation, algorithm implementation, feature space selection, thematic output definition, and scripting will be discussed and implemented.

0101	Matthew Hansen	Seats (Total: 25)	
	TuTh 2:00pm - 3:15pm	LEF 1158	
	W 12:00pm - 1:50pm	LEF 1138	Lab

GEOG642 Biogeography and Environmental Change

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of BSOS-Geography department. Jointly offered with GEOG442. Credit only granted for: GEOG788C, GEOG642, or GEOG442. Formerly: GEOG788C.

Biogeographical topics of global significance, including a consideration of measurement techniques, and both descriptive and mechanistic modeling. Topics may include: scale in biogeography, biodiversity, carbon geography, climate and vegetation, interannual variability in the biosphere, land cover, global biospheric responses to climate change, NASA's Mission to Planet Earth and Earth Observation System. The class focuses on both natural and anthropogenic controls, impacts of biogeography on climate and ecosystem services and different methods in biogeography.

0101	George Hurtt	Seats (Total: 30)	
	TuTh 12:30pm - 1:45pm	LEF 1158	

GEOG650 MOBILE GIS

Credits: 3 Grading Method: Regular

Prerequisite: GEOG657. Restriction: Must be in Geospatial Information Sciences (Master's) program; or must be in Graduate Certificate: Professional Studies-Geospatial Information Sciences.

This course covers how to create, test, and publish mobile GIS applications that work across multiple platforms (Android, iOS, and Black Berry Tablet OS) and adapt to a smartphone or tablet display.

For permission to enroll, contact geog-gis@umd.edu.

[Click here for program information.](#)

GI01	Eunjung Lim	Seats (Total: 50)	
	Meets August 26, 2019 - November 15, 2019		
	W 5:30pm - 8:00pm	LEF 1166	
	Th 5:30pm - 8:00pm	LEF 1166	Lab

GEOG652 Digital Image Processing and Analysis

Credits: 3 Grading Method: Regular

Prerequisite: GEOG579 or GEOG506; or students who have taken courses with comparable content may contact the department. Restriction: Must be in Geospatial Information Sciences (Master's) program; or must be in the Geospatial Information Sciences (Graduate Certificate) program.

Digital image processing and analysis applied to satellite and aircraft land remote sensing data. Consideration is given to preprocessing steps including calibration and geo registration. Analysis methods include digital image exploration, feature extraction thematic classification, change detection, and biophysical characterization. One or more application examples may be reviewed.

For permission to enroll, contact geog-gis@umd.edu.

[Click here for program information.](#)

GI01	Naijun Zhou	Seats (Total: 50)	
	Meets August 26, 2019 - November 15, 2019		
	W 6:30pm - 9:00pm	LEF 1171	
	Th 6:30pm - 9:00pm	LEF 1136	Lab

GI03	Naijun Zhou	Seats (Total: 20)	
	Meets August 26, 2019 - November 15, 2019		
	Tu 10:00am - 12:25pm	ONLINE	
	Tu 12:30pm - 3:00pm	ONLINE	Lab

GEOG653 Spatial Analysis

Credits: 3 Grading Method: Regular

Prerequisite: GEOG579 or GEOG506; or students who have taken courses with comparable content may contact the department. Restriction: Must be in Geospatial Information Sciences (Master's) program; or must be in the Geospatial Information Sciences (Graduate Certificate) program.

Methods of spatial analysis including measuring aspects of geometric features and identifying spatial patterns of geospatial objects that are represented as point, line, network, areal data, and 3-D surfaces.

For permission to enroll, contact geog-gis@umd.edu. Students must pay a \$40.00 lab fee.

[Click here for program information.](#)

GI01	Jianguo Ma	Seats (Total: 50)	
	Meets August 26, 2019 - November 15, 2019		
	M 5:30pm - 8:00pm	LEF 1158	
	Tu 5:30pm - 7:30pm	LEF 1136	Lab

GEOG654

GIS and Spatial Modeling

Credits: 3 Grading Method: Regular

Prerequisite: GEOG653. Restriction: Must be in Geospatial Information Sciences (Master's) program; or must be in Graduate Certificate: Professional Studies-Geospatial Information Sciences.

Provide foundations and understanding on various issues related to modeling and simulation in GIS context. It will addresses the concepts, tools, and techniques of GIS modeling, and presents modeling concepts and theory as well as provides opportunities for hands-on model design, construction, and application. The focus will be on raster-based modeling. This course is also application-orientated, particularly in these fields such as terrain modeling, LULC modeling, hydrological modeling, suitability modeling, etc.

For permission to enroll, contact geog-gis@umd.edu. Students must pay a \$40.00 lab fee.

[Click here for program information.](#)

GI01	Kristofer Lasko	Seats (Total: 50)	
	Meets August 26, 2019 - November 15, 2019		
	W 5:30pm - 8:00pm	LEF 1158	
	Th 5:30pm - 8:00pm	LEF 1138	Lab
GI02	Kristofer Lasko	Seats (Total: 25)	
	Meets August 26, 2019 - November 15, 2019		
	W 5:30pm - 8:00pm	LEF 1158	
	Th 5:30pm - 8:00pm	LEF 1138	Lab

GEOG656**Programming and Scripting for GIS**

Credits: 3

Grading Method: Regular

Prerequisite: GEOG653. Restriction: Must be in Geospatial Information Sciences (Master's) program; or must be in Graduate Certificate: Professional Studies-Geospatial Information Sciences.

An introduction to programming and scripting for intermediate GIS users. The fundamental concepts of computer programming will be introduced within the Geoprocessing framework in ArcGIS primarily using Python. Basic concepts of object-oriented programming and scripting will be presented. Students will develop skills in programming techniques to explore, manipulate and model spatial data using the Geoprocessor methods.

Contact department for information to register for this course.

GEOG661**Fundamentals of Geospatial Intelligence**

Credits: 3

Grading Method: Regular

Geospatial Intelligence (GEOINT) is the collection, analysis, visualization and dissemination of geospatial information to support decision-making. This course introduces the fundamental knowledge required to become a successful GEOINT practitioner, including the history of the GEOINT discipline, the intelligence applications of remote sensing and Geographic Information Systems (GIS) technologies, and how GEOINT products are used to support national security and humanitarian missions. Upon completion of this course you will understand the roles that technology, policy, doctrine, government, and industry play in shaping the Geospatial Intelligence discipline, and develop the technical knowledge and domain expertise to create basic GEOINT products that provide context for decision makers.

GI01	Micah Brachman	Seats (Total: 10)
	Meets August 26, 2019 - November 15, 2019	
	W 5:30pm - 8:00pm	LEF 1106
	Th 5:30pm - 8:00pm	LEF 1106 Lab
GI02	Micah Brachman	Seats (Total: 10)
	Meets August 26, 2019 - November 15, 2019	
	W 5:30pm - 8:00pm	LEF 1106
	Th 5:30pm - 8:00pm	LEF 1106 Lab
GI03	Micah Brachman	Seats (Total: 5)
	Meets August 26, 2019 - November 15, 2019	
	W 5:30pm - 8:00pm	LEF 1106
	Th 5:30pm - 8:00pm	LEF 1106 Lab

GEOG662**Advances in GIS and Remote Sensing**

Credits: 3

Grading Method: Regular,
Audit

Restriction: Students taking the course must be familiar with data structures, basic GIS and RS concepts, and demonstrate basic understanding of using GIS and RS software. And must be enrolled in Geographical Sciences MPS or graduate certificate program; or permission of BSOS-Geography department.

Focuses on state-of-the-art advances in geographic information science and remote sensing as they support geospatial intelligence. Focus on synergies between GIS and remote sensing in informatics, computer science, and spatial engineering, and their application to problem domains in human systems, physical systems, and cyberspace. Advances in GIS presents recent advances regarding fundamental issues of geo-spatial information science (space and time, spatial analysis, uncertainty modeling and geo-visualization), and new scientific and technological research initiatives for geo-spatial information science (such as spatial data mining, mobile data modeling, and location-based services). Advances in remote sensing will provide opportunity to understand and work with latest developments in the Remote Sensing datasets. The curriculum covers wide range of remote sensing data interpretation and their processing techniques.

GI01	Ruibao Han	Seats (Total: 15)	
	Meets August 26, 2019 - November 15, 2019		
	M 5:30pm - 8:00pm	LEF 1106	
	Tu 5:30pm - 8:00pm	LEF 1106	Lab
GI02	Ruibao Han	Seats (Total: 15)	
	M 5:30pm - 8:00pm	LEF 1106	
	Tu 5:30pm - 8:00pm	LEF 1106	Lab

GEOG686**Mobile GIS and Geocomputing**

Credits: 3

Grading Method: Regular

Prerequisite: Permission of BSOS-Geography department; or must be enrolled in Geographical Sciences MPS or graduate certificate program. Recommended: Students taking the course must be familiar with data structures, basic GIS concepts, and demonstrate basic understanding of object-oriented programming under GIS environment. Credit only granted for: GEOG477, GEOG498V, GEOG788V or GEOG777. Additional information: Tablets that run android and iOS will be loaned to registered students at no cost.

An introduction to mobile GIS, to the programming concepts underlying mobile GIS development, and to the design and implementation of a mobile GIS application. Covers how to develop, test, and publish mobile GIS native apps working across two mobile platforms: Android and iOS. Leverages the capabilities of JavaScript, Swift, Google maps, ArcGIS Server and runtime SDK to developing and publishing mobile GIS apps.

GI01	Ruibo Han	Seats (Total: 15)
	Meets August 26, 2019 - November 15, 2019	
	W 5:30pm - 8:00pm	LEF 1221
	Th 5:30pm - 8:00pm	LEF 1221 Lab

GEOG697

Capstone Project

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: 24 credits in GEOG courses. Restriction: Students taking the course must be familiar with data structures, basic GIS and RS concepts, and demonstrate basic understanding of using GIS and RS software. And must be enrolled in Geographical Sciences MPS or graduate certificate program; or permission of BSOS-Geography department.

An independent research project that demonstrates competence in geospatial intelligence technologies. This project can originate from an internship, from relevant work at a current or past employer, or can be developed in conjunction with a department faculty. The student will prepare a project report and presentation which shall contain an executive summary, background information including a literature review and establishment of requirements, a detailed technical description of the project data and methods, a discussion of results obtained, and final conclusions and recommendations. The final project submission will include all data, computer code and/or workflow documentation required to replicate the project results. In completing this project, students develop a concrete example of how GEOINT technologies can be applied to solve real-world problems, and begin developing a portfolio that can be presented to potential employers.

GI01	Ruibo Han	Seats (Total: 15)
	Meets August 26, 2019 - November 15, 2019	
	M 5:30pm - 9:15pm	LEF 1220

GEOG732

Spatial Econometrics

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of BSOS-Geography department. Or GEOG201; and GEOG306; and GEOG202; and GEOG332. Jointly offered with GEOG432. Credit only granted for: GEOG498E, GEOG432, GEOG788E, GEOG732. Formerly: GEOG498E, GEOG788E.

An introduction to modern econometric techniques in general and spatial econometrics in particular, using the popular open source statistical computer language R. A focus on using statistical computing to produce analytical reports for real-world applications, research papers, and dissertations.

0101	Laixiang Sun	Seats (Total: 24)
	Tu 3:30pm - 6:00pm	LEF 1171

GEOG788 Selected Topics in Geography

(Perm req)

Credits: 1-3 Grading Method: Regular

Readings and discussion on selected topics in the field of geography.

Repeatable to 6 credits if content differs.

Contact department for information to register for this course.

GEOG788G Selected Topics in Geography; Object-Oriented Computer Programming for GIS

Credits: 3 Grading Method: Regular,
Audit, Sat-Fail

Readings and discussion on selected topics in the field of geography.

0101	Junchuan Fan	Seats (Total: 25)
	MW 9:00am - 9:50am	LEF 1220
	W 10:00am - 11:50am	LEF 1138 Lab

GEOG788J Selected Topics in Geography; Using Python for Data Science

Credits: 1 Grading Method: Regular,
Audit

Readings and discussion on selected topics in the field of geography.

An introduction to using Python programming language for data science tasks relevant to research and analysis for many scientific and social science domains. Focus on accomplishing data science tasks using Python libraries like Pandas and Numpy, implementing machine-learning tasks using Scikit-learn, and implementing an end-to-end automated machine learning pipeline.

0101	Ritvik Sahajpal	Seats (Total: 20)
	Meets August 26, 2019 - October 4, 2019	
	M 5:30pm - 8:30pm	LEF 1201

GEOG788P Selected Topics in Geography; Models and Methods for Spatial Data Science

Credits: 3 Grading Method: Regular,
 Audit

Readings and discussion on selected topics in the field of geography.

Introduces a spatial data science (SDS) framework for uncovering spatial patterns and understanding spatial processes, whether they are generated by humans, the physical environment, or a combination thereof. This course first covers some basic principles of popular computational tools for SDS and then surveys a variety of geographic conceptual models and quantitative methods from the traditions of spatial analysis and spatial statistics. A strong emphasis is placed on the practical deployment of these models and methods and their interpretation. Students will develop expertise in common design decisions, analytical intuition, and limitations of SDS through real world examples and applied projects, as well as build their repertoire of Python programming skills for obtaining, processing, and analyzing spatial data.

0101	Taylor Oshan	Seats (Total: 7)	
	MW 10:00am - 10:50am	LEF 1158	
	Th 9:00am - 10:50am	LEF 1136	Lab

GEOG788Z Selected Topics in Geography; Topics in Data Visualization with Processing and Applications in R

Credits: 3 Grading Method: Regular,
 Audit, Sat-Fail

Readings and discussion on selected topics in the field of geography.

0101	Giovanni Baiocchi	Seats (Total: 20)	
	W 4:00pm - 6:30pm	Location: TBA	

GEOG789 Independent Readings

(Perm req)

Credits: 1-3 Grading Method: Regular,
 Audit

Independent reading as arranged between a graduate faculty member and graduate student.

Repeatable to 6 credits if content differs.

Contact department for information to register for this course.

GEOG790 Internship in Geography

Credits: 3 Grading Method: Regular,
 Audit

*Field experience in the student's specialty in a Federal, state, or local agency or private business.
Research paper required.*

Contact department for information to register for this course.

GEOG797

Credits: 3 Grading Method: Regular

Prerequisite: GEOG795; and must have completed or be concurrently enrolled in ENCE662.

Restriction: Must be in Geospatial Information Sciences (Master's) program.

Data and materials can originate from an internship (internal or external) or from relevant work experience with current employer. Under direction of faculty advisor, students will prepare a project report containing explanation of the requirements for the work, technical account of the activities undertaken, including literature review, description of methods and approaches taken, a critical discussion of results, along with conclusions and recommendations developed from the project. Final project will consist of a full-fledged GIS application that is up and running and can be tested, providing potential employers with a portfolio demonstrating student's ability to manage and develop a GIS application in real world situations.

For permission to enroll, contact geog-gis@umd.edu.

Click here for program information.

GI01	Eunjung Lim	Seats (Total: 30)	
	Meets August 26, 2019 - November 15, 2019		
	M 5:30pm - 8:00pm	LEF 1171	
	Tu 5:30pm - 8:00pm	LEF 1220	Discussion
GI02	Eunjung Lim	Seats (Total: 25)	
	Meets August 26, 2019 - November 15, 2019		
	M 5:30pm - 8:00pm	LEF 1171	
	Tu 5:30pm - 8:00pm	ONLINE	Discussion

GEOG798

(Perm req)

Credits: 1 Grading Method: Regular, Audit

Readings and discussions on selected topics in the field of geography.

0101	Rachel Berndtson	Seats (Total: 50)
	Th 3:45pm - 5:15pm	LEF 1158

GEOG799

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

GEOG898**Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

GEOG899**Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

GEOL**Geology****Fall 2019**

GEOL100**Physical Geology**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

General Education: DSNL (if
taken with GEOL110), DSNS

*Credit only granted for: GEOL100 or GEOL120. Additional information: CORE Distributive Studies
Physical Science Laboratory Course only when taken concurrently with GEOL 110.*

*A general survey of the rocks and minerals composing the earth, its surface features and the agents
that form them, and the dynamic forces of plate tectonics.*

0101	Tracey Centorbi	Seats (Total: 99)
	MWF 1:00pm - 1:50pm	ATL 2324
0201	William McDonough	Seats (Total: 99)
	TuTh 2:00pm - 3:15pm	TWS 0310

GEOL104**Dinosaurs: A Natural History**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

CORE: PS

General Education: DSNS

*Dinosaurs, their evolution, and our understanding of their fossil record. Students will examine the
geologic record and the tools used by paleontologists to determine: geologic ages and ancient
environments; evolutionary history and extinctions; dinosaurian biology and behavior; and their survival
as birds. Mechanisms of global change ranging from plate tectonics to asteroid impact will be
discussed.*

0101	Thomas Holtz	Seats (Total: 60)
	MWF 10:00am - 10:50am	PLS 1130

GEOL110**Physical Geology Laboratory**

Credits: 1 Grading Method: Regular,
Pass-Fail

Prerequisite: Must have completed or be concurrently enrolled in GEOL120 or GEOL100. Additional information: CORE Distributive Studies Physical Science Laboratory Course only when taken concurrently with GEOL 100.

The basic materials and tools of physical geology stressing familiarization with rocks and minerals and the use of maps in geologic interpretations.

Students must pay a \$50.00 laboratory materials fee.

0101	Megan Newcombe, Heidi Myers Th 12:00pm - 3:00pm	Seats (Total: 24) GEO 2106	Lab
0102	Megan Newcombe, Karla Nunez M 12:00pm - 3:00pm	Seats (Total: 24) GEO 2106	Lab
0103	Heidi Myers, Megan Newcombe Tu 12:00pm - 3:00pm	Seats (Total: 24) GEO 2106	Lab
0104	James Bader, Megan Newcombe Tu 3:00pm - 6:00pm	Seats (Total: 24) GEO 2106	Lab
0106	Megan Newcombe, Karla Nunez W 9:00am - 12:00pm	Seats (Total: 24) GEO 2106	Lab
0107	Megan Newcombe, Goeun Ha W 3:00pm - 6:00pm	Seats (Total: 24) GEO 2106	Lab
0109	James Bader, Megan Newcombe Tu 9:00am - 12:00pm	Seats (Total: 24) GEO 2106	Lab

GEOL120**Environmental Geology**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: PS General Education: DSNL (if
taken with GEOL110), DSNS

Credit only granted for: GEOL100 or GEOL120.

A review of geologic factors underlying many environmental problems and the interactions between population and physical environment: geologic hazards, land-use planning, conservation, mineral resources, waste disposal, land reclamation, and the geologic aspects of health and disease. The course is aimed at lower division students in education and liberal arts, and should be useful to any student concerned with geologic perspectives of environmental problems.

0101	Tracey Centorbi TuTh 12:30pm - 1:45pm M 3:00pm - 3:50pm	Seats (Total: 20) TWS 0310 PLS 1168	Discussion
0102	Tracey Centorbi TuTh 12:30pm - 1:45pm M 4:00pm - 4:50pm	Seats (Total: 20) TWS 0310 PLS 1168	Discussion
0103	Tracey Centorbi TuTh 12:30pm - 1:45pm M 5:00pm - 5:50pm	Seats (Total: 20) TWS 0310 PLS 1168	Discussion
FC02	Tracey Centorbi TuTh 4:30pm - 5:45pm F 10:00am - 10:50am <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) PHY 0405 PLS 1164	Discussion

GEOL123 Causes and Consequences of Global Change

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSNS, SCIS

Cross-listed with AOSC123. Credit only granted for: AOSC123, GEOG123, GEOL123, or METO123.

Study of the major components of Earth's climate system and climate change history. Discussion of 21st century climate change prediction, mitigation and adaptation efforts.

0101	Rachel Pinker MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 32) ATL 2416 ATL 2416	Discussion
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GEOL124 Evolution of Life and Environment on Planet Earth

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSNS, SCIS

An exploration of how life has shaped Earth's physical environments, both in the contemporary Earth and over the long course of Earth history. Topics range from evidence for the origin and diversification of life and its impact on Earth environments to the mind-set and methods of the scientists who interpret it, and what those methods tell us about future interactions between life and the environment, both on Earth and in the Solar System.

Restricted to students in Carillon Communities.

0101	James Farquhar	Seats (Total: 20)	
	TuTh 12:30pm - 1:45pm	SKN 0104	
	W 3:00pm - 3:50pm	PLS 1162	Discussion
0102	James Farquhar	Seats (Total: 20)	
	TuTh 12:30pm - 1:45pm	SKN 0104	
	W 4:00pm - 4:50pm	PLS 1162	Discussion
0103	James Farquhar	Seats (Total: 20)	
	TuTh 12:30pm - 1:45pm	SKN 0104	
	W 5:00pm - 5:50pm	PLS 1162	Discussion

GEOL200

Earth's Fury: Earthquakes, Volcanoes, and Tsunami

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: PS

General Education: DSNS,
SCIS

Earthquakes, volcanic eruptions, and tsunami frequently remind us of the dangers associated with living on a constantly changing planet. How do people prepare for these rare but dramatic events? Student will study the science behind earthquakes and volcanoes, how it guides monitoring, forecasting, prevention, and response, and the cultural and ethical aspects of these events.

0101	Laurent Montesi	Seats (Total: 20)	
	TuTh 9:30am - 10:45am	ESJ 2208	
	W 3:00pm - 3:50pm	ESJ 2309	Discussion
0102	Laurent Montesi	Seats (Total: 20)	
	TuTh 9:30am - 10:45am	ESJ 2208	
	W 4:00pm - 4:50pm	ESJ 2309	Discussion
0103	Laurent Montesi	Seats (Total: 20)	
	TuTh 9:30am - 10:45am	ESJ 2208	
	W 5:00pm - 5:50pm	ESJ 2309	Discussion

0104	Laurent Montesi	Seats (Total: 20)	
	TuTh 9:30am - 10:45am	ESJ 2208	
	W 3:00pm - 3:50pm	ESJ 2309	Discussion
0105	Laurent Montesi	Seats (Total: 20)	
	TuTh 9:30am - 10:45am	ESJ 2208	
	W 4:00pm - 4:50pm	ESJ 2309	Discussion
0106	Laurent Montesi	Seats (Total: 20)	
	TuTh 9:30am - 10:45am	ESJ 2208	
	W 5:00pm - 5:50pm	ESJ 2309	Discussion

GEOL212

Planetary Geology

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSNS

Credit only granted for: ASTR330 or GEOL212.

An examination of the geologic and geochemical processes at work in the solar system from the perspectives supplied by space age exploration of the planets and other solar system bodies.

0101	John Merck	Seats (Total: 24)	
	MWF 9:00am - 9:50am	PLS 1115	

GEOL342

Sedimentation and Stratigraphy

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: GEOL120 or GEOL100; and GEOL110; and GEOL322. And CHEM103; or (CHEM131 and CHEM132); or (CHEM135 and CHEM136). Restriction: Permission of instructor is required of non-degree-seeking students.

Description, origin, and distribution of sediments and sedimentary rocks. Two mandatory weekend field trips.

0101	John Merck	Seats (Total: 15)	
	MWF 1:00pm - 1:50pm	PLS 1172	
	Tu 3:30pm - 6:30pm	GEO 2107	Lab

GEOL375

Introduction to the Blue Ocean

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: MATH140. Recommended: MATH141, PHYS161, or PHYS171. Restriction: Non-degree-seeking students require the permission of the instructor. Cross-listed with AOSC375. Credit only granted for: AOSC375, GEOL375 or METO375.

Introduction to physical, chemical, and biological properties of the ocean. Role of the ocean in climate as a component of the Earth system. El Nino and the ocean, impact of global warming on the ocean and marine habitats including fisheries.

0101	Jose-Henrique Alves	Seats (Total: 23)
	TuTh 11:00am - 12:15pm	ATL 2428

GEOL393

Geology Senior Thesis I: Proposal

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS141 and MATH141. And CHEM131 and CHEM132; or (CHEM135 and CHEM136). And must have completed at least two upper-level geology courses and be concurrently enrolled in a third. Restriction: Junior standing or higher; and must be in Geology program; and non-degree-seeking students require the permission of the instructor.

The first semester of the two-semester Geology Senior Thesis. Emphasis is on developing a plan for original research in the geosciences and presenting that plan both in writing and in public presentations that adhere to geosciences professional standards.

0101	Philip Piccoli	Seats (Total: 15)
	W 4:00pm - 6:00pm	PLS 1111
	Contact instructor or department for details.	

GEOL394

Geology Senior Thesis II: Research

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

Prerequisite: GEOL393; and must have completed at least three upper level GEOL courses. Restriction: Must be in Geology program; and junior standing or higher; and in addition, non-degree-seeking students require the permission of the department.

The second semester of the two-semester Geology Senior Thesis. Investigation of specific original research question in geosciences. Emphasis is on completion of original research proposed in GEOL393 and presentation of results both in writing and in public presentations that adhere to geosciences professional standards.

Contact department for information to register for this course.

GEOL423

Optical Mineralogy

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GEOL100 or GEOL120; and GEOL110; and GEOL322. And CHEM131 and CHEM132; or (CHEM135 and CHEM136); or CHEM103. Restriction: Non-degree-seeking students require the permission of the instructor.

The optical behavior of crystals with emphasis on the theory and application of the petrographic microscope.

0101	Sarah Penniston-Dorland	Seats (Total: 17)	
	MWF 9:00am - 9:50am	HBK 0109	
	W 10:00am - 1:00pm	GEO 2117	Lab

GEOL436 Principles of Biogeochemistry

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: MATH140 or MATH120; or must have completed MATH220. And GEOL100 or GEOL120; or GEOL322. And CHEM131 and CHEM132; or (CHEM135 and CHEM136). Restriction: Non-degree-seeking students require the permission of the instructor. Cross-listed with AOSC436. Credit only granted for: GEOL436 or AOSC436.

An introduction to the basic principles of biogeochemistry including aspects of organic geochemistry, biochemistry, microbiology, global geochemical cycles, the origin of life and paleoenvironmental evolution.

0101	Alan Kaufman	Seats (Total: 15)	
	TuTh 8:00am - 9:15am	PLS 1119	

GEOL444 Low Temperature Geochemistry

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GEOL322, GEOL100, and MATH115. And CHEM103; or (CHEM131 and CHEM132); or (CHEM135 and CHEM136). Restriction: Non-degree-seeking students require the permission of the instructor.

Basic chemical principles, thermodynamics, and kinetics of low-temperature inorganic and organic geochemical reactions in a wide range of surface environments. These geochemical tools will be used to provide a context for understanding elemental cycling and climate change. Laboratories will include problem sets as well as wet chemical and mass spectrometric techniques used in low temperature geochemistry.

0101	James Farquhar	Seats (Total: 12)	
	TuTh 8:00am - 9:15am	PLS 1172	
	M 3:00pm - 5:45pm	CHM 1330	Lab

GEOL445 High Temperature Geochemistry

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GEOL322, GEOL100, and MATH115. And CHEM131 and CHEM132; or (CHEM135 and CHEM136); or CHEM103. Restriction: Non-degree-seeking students require the permission of the instructor.

Review of chemical principles and their use in understanding processes of Earth, and solar system formation and differentiation. Topics include nucleosynthesis and cosmochemical abundances of elements, bonding and element partitioning, equilibrium thermodynamics and phase stabilities, radiogenic isotopes and geochronology, kinetics, and diffusion.

0101	Ricardo Arevalo	Seats (Total: 20)	
	TuTh 12:30pm - 1:45pm	PLS 1172	
	Th 2:00pm - 4:45pm	HBK 1108	Lab

GEOL446 Geophysics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS141, MATH141, and MATH140; and (GEOL100 or GEOL120). Restriction: Non-degree-seeking students require the permission of the instructor.

An introduction to modern geophysics. Topics include: global plate tectonics, plate motion, triple junctions, geomagnetism, earthquakes and faulting, reflection and refraction seismology, gravity and isostasy, heat flow and mantle dynamics, deep interior of the Earth, geophysical observations and measurements.

0101	Mong-Han Huang	Seats (Total: 23)	
	TuTh 11:00am - 12:15pm	PLS 1162	

GEOL451 Groundwater

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GEOL110 and MATH140; and (GEOL120 or GEOL100); and (CHEM131 and CHEM132; or (CHEM135 and CHEM136); or CHEM103). Or permission of CMNS-Geology department. Restriction: Non-degree-seeking students require the permission of the instructor; and junior standing or higher.

An introduction to the basic geologic parameters associated with the hydrologic cycle. Problems in the accumulation, distribution, and movement of groundwater will be analyzed.

0101	Wenlu Zhu	Seats (Total: 24)
	TuTh 2:00pm - 3:15pm	CSI 3120

GEOL452 Watershed and Wetland Hydrology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Junior standing or higher; and all other students require the permission of the instructor.

Physical processes by which water moves in watershed and wetland systems. Topics include: precipitation, infiltration, flow in the unsaturated zone, streamflow generation processes, and groundwater flow.

0101	Karen Prestegaard	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	PLS 1130

GEOL453 Ecosystem Restoration

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH120 or MATH140; or must have completed MATH220. And (CHEM131 or CHEM135); and (CHEM132 or CHEM136); and (GEOL100, GEOL120, or ENST200). Restriction: Junior standing or higher; and permission of instructor is required of non-degree-seeking students. Credit only granted for: GEOL453 or GEOL489L. Formerly: GEOL489L.

Overview of ecosystem functions across biomes/geologic settings, and considerations and tradeoffs in ecosystem restoration strategies. Specific case studies and discussions will be aimed at understanding how structure can influence biophysical and biogeochemical processes supporting ecosystems, and then describes how rates, timing, and location of physical, chemical, and ecosystem processes can be altered by different restoration strategies to enhance ecosystem services.

Jointly offered with MEES698E and GEOL789L.

0101	Sujay Kaushal	Seats (Total: 10)
	Tu 3:30pm - 6:30pm	CHE 2140

GEOL455 Marine Geophysics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH141 and MATH140; and (GEOL120 or GEOL100). Or permission of CMNS-Geology department. Restriction: Non-degree-seeking students require the permission of the instructor. Credit only granted for: GEOL455 or GEOL489E. Formerly: GEOL489E.

Plate tectonics, earthquakes and faulting, isostasy and gravity, heat and mantle dynamics, ocean ridges and transform faults, hydrothermal vents, trenches and oceanic islands, subduction zones, accretionary and erosion wedges, sedimentary basins and continental rifts. Exploration of the oceans using geophysical methods.

0101	Wenlu Zhu	Seats (Total: 10)
	W 1:00pm - 3:30pm	PLS 1168

GEOL460 Field Geophysics

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

*Prerequisite: MATH140, MATH141, and GEOL446; and (PHYS141, PHYS161, or PHYS171).
Restriction: Non-degree-seeking students require the permission of the instructor.*

Students will become familiar with geophysical instrumentation used for both scientific and industrial applications. Students will be given an introduction to the use of geophysical instrumentation for data collection, processing, and analysis, design of field experiments for investigating field geophysical problems, and an introduction to the theory of instrument design and use. Instruments that will be covered include (but are not limited to): broadband seismometers, geophones, ground-penetrating radar, magnetotellurics, and Global Positioning Satellites.

0101	Nicholas Schmerr	Seats (Total: 15)
	M 10:00am - 1:50pm	CHE 1215

GEOL488 Geology Colloquium

Credits: 1 Grading Method: Sat-Fail

Contemporary research topics and issues in geosciences are explored through the weekly Geology departmental colloquium and discussion of its contents.

0101	Mong-Han Huang	Seats (Total: 30)
	F 3:00pm - 4:30pm	PLS 1130

GEOL489G Special Topics; Geoscientific Modeling

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Recent advances in geology.

0101	Michael Evans	Seats (Total: 10)
	MW 10:00am - 10:50am	PLS 1121
	F 10:00am - 10:50am	PLS 1176

GEOL499 Special Problems in Geology

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Intensive study of a special geologic subject or technique selected after consultation with instructor. Intended to provide training or instruction not available in other courses which will aid the student's development in his or her field of major interest.

Prerequisites: GEOL100 or GEO120, GEOL110, GEOL102; or equivalent; and permission of department. In addition, non-degree-seeking students require the permission of the instructor. Intensive study of a special geologic subject or technique selected after consultation with instructor. Intended to provide training or instruction not available in other courses which will aid the student's development in his or her field of major interest.

Contact department for information to register for this course.

GEOL636 Ecosystem Restoration

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: MATH120 or MATH140; and (CHEM131 or CHEM135); and (CHEM132 or CHEM136); and (GEOL100, GEOL120, or ENST200). Restriction: Equal preference is given to students enrolled in GEOL, MEES, CONS, ENST, AOSC, and civil and environmental engineering graduate programs; and permission of Instructor required for non degree seeking students. Credit only granted for: GEOL453 or GEOL489L. Formerly: GEOL489L.

A further understanding of ecosystem functions across biomes/geologic settings, and developing practical applications in ecosystem restoration strategies through a graduate level project. Specific case studies and discussions will be aimed at understanding how structure can influence biophysical and biogeochemical processes supporting ecosystems, and then describes how rates, timing, and location of physical, chemical, and ecosystem processes can be altered by different restoration strategies to enhance ecosystem services. A project will then be used to apply restoration principles towards solving tangible environmental problems and communication to managers.

0101	Sujay Kaushal	Seats (Total: 10)
	Tu 3:30pm - 6:30pm	CHE 2140

GEOL650 Isotope and Trace Element Geochemistry

Credits: 3 Grading Method: Regular,
Audit

Trace elements and isotopes in geology, including modern applications in geochronology and petrogenesis.

0101	Richard Walker	Seats (Total: 15)
	TuTh 9:30am - 10:45am	PLS 1168

GEOL652 Advanced Watershed and Wetland Hydrology

Credits: 3 Grading Method: Regular, Audit

Prerequisite: GEOL452; or permission of CMNS-Geology department. Restriction: Non-degree-seeking students require the permission of the instructor.

Physical and chemical processes in watershed and wetland systems: with an emphasis on redox reactions.

0101	Karen Prestegaard	Seats (Total: 10)
	TuTh 3:30pm - 4:45pm	PLS 1130

GEOL655 Marine Geophysics

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Permission of CMNS-Geology department. Recommended: GEOL120 or GEOL100; and MATH141. Restriction: Non-degree-seeking students require the permission of the instructor. Credit only granted for: GEOL655 or GEOL789E. Formerly: GEOL789E.

An introduction to geophysical aspects of global tectonics. Quantitative geophysical approaches are introduced for: past and present plate motions, seismology and interior of the Earth, gravity and isostasy, heat and mantle dynamics. Ocean ridges, hydrothermal vents, transform faults, oceanic core complex, ocean trenches and subduction zones, accretionary and erosion wedges, rift and rift margins, convergence and collisions, sedimentary basins.

0101	Wenlu Zhu	Seats (Total: 10)
	W 1:00pm - 3:30pm	PLS 1168

GEOL670 Physical Oceanography

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of CMNS-Atmospheric & Oceanic Science department; or permission of CMNS-Geology department. Jointly offered with AOSC420, AOSC670. Credit only granted for: GEOL670, AOSC670 or AOSC420.

Ocean observations. Water masses, sources of deep water. Mass, heat, and salt transport, geochemical tracers. Western boundary currents, maintenance of the thermocline. Coastal and estuarine processes. Surface waves and tides. Ocean climate.

0101	James Carton	Seats (Total: 11)
	MW 3:15pm - 4:30pm	ATL 2416
AM01	James Carton	Seats (Total: 1)
	MW 3:15pm - 4:30pm	ATL 2416

GEOL680

Geodynamics

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of CMNS-Geology department; or (MATH241, MATH462, and GEOL446). Recommended: Familiarity with MATLAB or MATHEMATICA. Credit only granted for: GEOL680 or GEOL789J. Formerly: GEOL789J.

The mechanics and dynamics of the Earth's interior and their applications to problems of Geophysics. This course considers several rheological descriptions of Earth materials (brittle, elastic, linear and nonlinear fluids, and viscoelastic) and emphasizes analytical solutions to simplified problem.

0101	Laurent Montesi	Seats (Total: 10)
	TuTh 12:30pm - 1:45pm	PLS 1168

GEOL688

Geology Colloquium

Credits: 1 Grading Method: Sat-Fail

Contemporary research topics and issues in geosciences are explored through the weekly Geology departmental colloquium and discussion of its contents.

0101	Mong-Han Huang	Seats (Total: 30)
	F 3:00pm - 4:30pm	PLS 1130

GEOL789G

Recent Advances in Geology; Geoscientific Modeling

Credits: 2-4 Grading Method: Regular,
Audit

Recent advances in geology research.

0101	Michael Evans	Seats (Total: 10)
	MW 10:00am - 10:50am	PLS 1121
	F 10:00am - 10:50am	PLS 1176

GEOL789P Recent Advances in Geology; Principles of Biogeochemistry

Credits: 3 Grading Method: Regular,
 Audit

Recent advances in geology research.

An introduction to the basic principles of biogeochemistry including aspects of organic geochemistry, biochemistry, microbiology, global geochemical cycles, and the origin of life and paleoenvironmental evolution. This course is co-listed with GEOL436, but for graduate credit, a research or literature review paper and related presentation are due by the end of the semester.

0101	Alan Kaufman	Seats (Total: 15)
	TuTh 8:00am - 9:15am	PLS 1119

GEOL798 Seminar in Geology

(Perm req)

Credits: 1-3 Grading Method: Regular,
 Audit

Discussion of special topics in current literature in all phases of geology.

Contact department for information to register for this course.

GEOL799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

GEOL898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

GEOL899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

GERM Germanic Studies

Fall 2019

GERM103 Intensive Elementary German

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not have completed GERM102; and must not be a fluent/native speaker of German. Credit only granted for: GERM102 or GERM103.

Covers speaking, reading, writing, listening, and culture of German-speaking world.

0101	Marion Lindstrom	Seats (Total: 25)
	MWF 11:00am - 11:50am	JMZ 0118
	Class time/details on ELMs	ONLINE
0102	Willi Barthold	Seats (Total: 25)
	Class time/details on ELMs	ONLINE
	Class time/details on ELMs	ONLINE

GERM148Y Germanic Languages - Elementary I; Yiddish I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Basic instruction in a Germanic language other than German; Yiddish and Swedish are offered regularly, Danish, Netherlandic, and Norwegian when demand is sufficient. Subtitle will reflect the language. May be repeated in a different language.

Jointly offered with JWST281. Credit only granted for JWST281 or GERM148 Y. Introduction to the Yiddish language, with emphasis on speaking, reading, and writing skills. Students will also learn the history o f the language, its significance to Jewish culture, its origins and basic structure.

0101	Adi Mahalel	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	JMZ 1205
	Class time/details on ELMs	ONLINE
<i>This is a Big Ten Academic Alliance Course-Share course.</i>		

GERM203 Intensive Intermediate German

Credits: 4 Grading Method: Regular, CORE: HO
Audit

Prerequisite: GERM103; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not have completed GERM201; and must not have completed GERM202; and must not be a fluent/native speaker of German. Credit only granted for: GERM202 or GERM203.

Covers speaking, reading, writing, listening, and culture of German-speaking world.

0101	Willi Barthold	Seats (Total: 25)
	Class time/details on ELMs	ONLINE
	Class time/details on ELMs	ONLINE
0102	Marion Lindstrom	Seats (Total: 25)
	MWF 12:00pm - 12:50pm	JMZ 1224
	Class time/details on ELMs	ONLINE

GERM204
German Grammar Review

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: HO

*Prerequisite: GERM203; or Must have appropriate Foreign Language Placement Test (FLPT) score.
Restriction: Must not be a fluent/native speaker of German.*

An in-depth study and analysis of selected grammatical topics in a contextualized framework.

0101	Regina Ianozi	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	JMZ 3205

GERM269A
Special Topics in Study Abroad II; Elementary German I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GERM269B
Special Topics in Study Abroad II; Elementary German II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GERM301
Conversation and Composition I: The German-Speaking World

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GERM204; or students who have taken courses with comparable content may contact the department.

Practice in contemporary spoken and written German. Systematic review of grammar, and exercises in composition. Emphasis on cultural contrasts in the German-speaking world.

0101	Regina Ianozi	Seats (Total: 20)
	Tu 2:00pm - 3:15pm	JMZ 1226
	Th 2:00pm - 3:15pm	JMZ 2117

GERM302 Conversation and Composition II: Current Topics in German-Speaking Society

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GERM301; or students who have taken courses with comparable content may contact the department.

Further practice in contemporary spoken and written German. Contemporary social, political, and cultural themes.

0101	Regina Ianozi	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	JMZ 1117

GERM319G Selected Topics in Germanic Language Studies; Seminar in German Language

Credits: 3 Grading Method: Regular

The analysis of the German language as a reflection of cultural, functional, and social practice in the German-speaking world.

Contact department for information to register for this course.

GERM322 Highlights of German Literature and Culture

Credits: 3 Grading Method: Regular, General Education: DSHU
Pass-Fail, Audit

Prerequisite: GERM302; or students who have taken courses with comparable content may contact the department.

Selected literary masterworks, social and cultural issues, and historical events in German-speaking countries from the Enlightenment, Romanticism, Junges Deutschland, Realism, Naturalism and its counter currents, Expressionism to the present. Taught in German.

Taught in German. Cross-listed with GERM322H.

0101	Josh Alvizu	Seats (Total: 25)
	MWF 11:00am - 11:50am	JMZ 1224

GERM322H Highlights of German Literature and Culture

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHU

Prerequisite: GERM302; or students who have taken courses with comparable content may contact the department.

Selected literary masterworks, social and cultural issues, and historical events in German-speaking countries from the Enlightenment, Romanticism, Junges Deutschland, Realism, Naturalism and its counter currents, Expressionism to the present. Taught in German.

Taught in German. Cross-listed with GERM322.

0101	Josh Alvizu	Seats (Total: 25)
	MWF 11:00am - 11:50am	JMZ 1224

GERM369C Special Topics in Study Abroad III; German Composition I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GERM369D Special Topics in Study Abroad III; German Composition II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GERM369K Special Topics in Study Abroad III; Introduction to German Literature

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GERM369M Special Topics in Study Abroad III; Europeans and the Middle East: War & Peace, Culture and Exchange, 1798-Present

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GERM369P Special Topics in Study Abroad III; Pop Culture: European-American Trends

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GERM386 Experiential Learning

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Prerequisite: Permission of ARHU-School of Languages, Literatures, and Cultures department.

Restriction: Junior standing or higher.

Contact department for information to register for this course.

GERM389F Topics in Germanic Culture; Berlin: History, Memory, Literature

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topics in the cultures of the German, Germanic, Indo-European peoples and of their culturally related non-Indo-European neighbors. Taught in English.

Contact department for information to register for this course.

GERM389G Topics in Germanic Culture; German American Cultural Contrasts

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topics in the cultures of the German, Germanic, Indo-European peoples and of their culturally related non-Indo-European neighbors. Taught in English.

Contact department for information to register for this course.

GERM397H Honors Reading (Independent Study)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Supervised reading to be taken normally only by students admitted into honors program.

Contact department for information to register for this course.

GERM399F Selected Topics in Germanic Studies; The Human Condition and the Totalitarian Experience

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

GERM411 German for International Business I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Advanced skills in German for international business, including understanding and writing correspondence, reports, graphics, ads, etc., according to current German commercial style.

Contact department for information to register for this course.

GERM439J Selected Topics in German Literature; Introduction to the History of the German Language

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special study of an author, school, genre, or theme. Taught in German.

Contact department for information to register for this course.

GERM442 Gender and Sexuality in German Literature and Society

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: GERM320 or GERM322.

Gender and Sexuality in German Literature and Society analyzes gender and sexuality as key discourses for understanding German-speaking literatures, cultures, and societies. Topics include the history of sexuality; death and desire; and representations of gender in German literature. Taught in German.

0101	Julie Koser	Seats (Total: 20)
	Tu 5:00pm - 7:45pm	JMZ 3205

GERM449G Selected Topics in Germanic Studies; Montage and Modern Life

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Study of a linguistic, literary or cultural topic in Yiddish, Netherlandic, or Scandinavian studies.

Jointly offered with GERM689G. Credit only granted for GERM449G or GERM6 89G. This seminar explores the relationship between montage/collage artistic practice and various conceptions of political art and literature in 20thcentury Germany. Authors, artists, and filmmakers to be discussed include Adorno, Benjamin, Brecht, Heartfield, Hoch, Kluge, Ruttmann , Seghers, Vertov, and Weiss.

0101	Josh Alvizu	Seats (Total: 20)
	W 4:30pm - 7:15pm	JMZ 1117

GERM499**Directed Study**

(Perm req)

Credits: 1-3

Grading Method: Regular,
Audit**Contact department for information to register for this course.**

GERM689G**Special Topics - M.A. Level; Montage and Modern Life**

Credits: 3

Grading Method: Regular,
Audit*M.A.-level study of a literary, linguistic or cultural topic in German or Germanic studies.*

Cross-listed with GERM689G. Credit only granted for GERM449G or GERM689G . This seminar explores the relationship between montage/collage artistic practice and various conceptions of political art and literature in 20 th century Germany. Authors, artists, and filmmakers to be discussed include Adorno, Benjamin, Brecht, Heartfield, Hoch, Kluge, Ruttmann, Seghers, Vertov, and Weiss.

0101	Josh Alvizu	Seats (Total: 20)
	W 4:30pm - 7:15pm	JMZ 1117

GERM689L**Special Topics - M.A. Level; Gender and Sexuality in German Literature and Society: The Politics of Desire**

Credits: 3

Grading Method: Regular,
Audit*M.A.-level study of a literary, linguistic or cultural topic in German or Germanic studies.*

Analysis of gender and sexuality as key discourses for understanding German-speaking literatures, cultures, and societies. Topics include the history of sexuality; death and desire; and representations of gender in German literature. Taught in German.

0101	Julie Koser	Seats (Total: 10)
	Tu 5:00pm - 7:45pm	JMZ 3205

GERM798**Master's Independent Study**

Credits: 1-3

Grading Method: Regular,
Audit**Contact department for information to register for this course.**

GERM799**Master's Thesis Research**

Credits: 1-6

Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

GERM888 Doctoral Independent Study

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

Contact department for information to register for this course.

GERM898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

GERM899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

GREK Greek

Fall 2019

GREK101 Elementary Ancient Greek I

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Restriction: A student who has had two units of Greek in high school may register for GREK101 for purposes of review but not for credit.

Study of basic grammar, development of reading facility, and introduction to Athenian life and culture in the fifth century B.C.

Classical and New Testament Greek.

0101	Gregory Bucher	Seats (Total: 20)
	MWF 10:00am - 10:50am	JMZ 3205
	W 9:00am - 9:50am	JMZ 3205

GREK111 Elementary Modern Greek I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must not be a native speaker of Greek. Credit only granted for: FOLA108G or GREK111. Formerly: FOLA108G.

An introduction to the language and culture of modern Greece. Students begin to acquire the basic tools of the language and to communicate, in simple everyday situations. This is the first of our two-semester sequence in Elementary Modern Greek and contributes to the fulfillment of the Global Engagement requirement of the College of Arts and Humanities.

0101	Polyvia Parara	Seats (Total: 15)
	MWF 12:00pm - 12:50pm	WDS 1130

GREK201 Intermediate Ancient Greek

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GREK102; or students who have taken courses with comparable content may contact the department.

Advancing beyond the basic skills developed in GREK 101 and GREK 102; review of selected grammatical concepts; continuous reading of passages from Greek literature.

0101	Gregory Bucher	Seats (Total: 10)
	MWF 2:00pm - 2:50pm	JMZ 2207
	M 1:00pm - 1:50pm	JMZ 0208

GREK211 Intermediate Modern Greek I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GREK112; or permission of instructor. Credit only granted for: FOLA118G or GREK211. Formerly: FOLA118G.

A continuation of the study of basic structures and the development of fluency in functional, spoken and written communication. This is the first of our two-semester sequence in Intermediate Modern Greek and contributes to the fulfillment of the Global Engagement requirement of the College of Arts and Humanities.

0101	Polyvia Parara	Seats (Total: 10)
	MWF 10:00am - 10:50am	MMH 1218

GREK398 Advanced Modern Greek

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Develops advanced communication skills in the modern Greek language: speaking, listening, reading, and writing.

0101	Polyvia Parara	Seats (Total: 10)
	MWF 11:00am - 11:50am	MMH 1218

GREK488B Greek Readings; INTERMEDIATE ANCIENT GREEK

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The reading of one or more selected Greek authors. Reports.

0101	Gregory Bucher	Seats (Total: 5)
	MWF 2:00pm - 2:50pm	JMZ 2207
	M 1:00pm - 1:50pm	JMZ 0208

GREK488J Greek Readings; TRAGEDY & COMEDY

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The reading of one or more selected Greek authors. Reports.

0101	Francisco Barrenechea	Seats (Total: 5)
	W 5:00pm - 7:40pm	JMZ 1120

GREK499 Independent Study in Greek Language and Literature

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

GREK688J Special Topics in Greek Literature; TRAGEDY & COMEDY

Credits: 3 Grading Method: Regular,
Audit

0101	Francisco Barrenechea	Seats (Total: 8)
	W 5:00pm - 7:40pm	JMZ 1120

GREK699 Independent Study in Greek Literature

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

Contact department for information to register for this course.

GREK799**Master's Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

GVPT**Government and Politics****Fall 2019****GVPT101****Introduction to Political Science**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS

A study of the basic principles and concepts of political science.

Contact department for information to register for this course.

GVPT105S**Introduction to Political Ethics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS

Restriction: Must be in the College Park Scholars program; and must be in International Studies program or Public Leadership program.

An examination of major theories of political life and politics as they pertain to international politics, conflict, and culture. Emphasis will be given to theories of ethics and morality that pertain to international studies, such as human rights.

0101	James Glass	Seats (Total: 25)	
	MW 2:00pm - 2:50pm	TYD 0117	
	F 9:00am - 9:50am	KEY 0126	Discussion
0102	James Glass	Seats (Total: 25)	
	MW 2:00pm - 2:50pm	TYD 0117	
	F 10:00am - 10:50am	KEY 0126	Discussion
0103	James Glass	Seats (Total: 25)	
	MW 2:00pm - 2:50pm	TYD 0117	
	F 11:00am - 11:50am	TYD 0101	Discussion
0104	James Glass	Seats (Total: 25)	
	MW 2:00pm - 2:50pm	TYD 0117	
	F 12:00pm - 12:50pm	TYD 0102	Discussion

GVPT158A**Special Topics in Study Abroad I; The European Union**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GVPT170

American Government

Credits: 3 Grading Method: Regular, CORE: SB General Education: DSHS
Pass-Fail, Audit

A comprehensive study of national government in the United States.

0101	Stella Rouse MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 25) LEF 2205 TYD 0101	Discussion
0102	Stella Rouse MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 25) LEF 2205 TYD 0101	Discussion
0103	Stella Rouse MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 25) LEF 2205 TYD 2109	Discussion
0104	Stella Rouse MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 25) LEF 2205 TYD 1132	Discussion
0105	Stella Rouse MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 25) LEF 2205 TYD 1132	Discussion
0106	Stella Rouse MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 25) LEF 2205 JMZ 0125	Discussion
0107	Stella Rouse MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 25) LEF 2205 TYD 2102	Discussion
0108	Stella Rouse MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 25) LEF 2205 TYD 0101	Discussion

0109	Stella Rouse	Seats (Total: 25)	
	MW 10:00am - 10:50am	LEF 2205	
	F 2:00pm - 2:50pm	TYD 0101	Discussion
FC01	Simon Sheaff	Seats (Total: 40)	
	MW 6:00pm - 7:15pm	ASY 2309	
	<i>Restricted to students in Freshman Connection.</i>		

GVPT200

International Political Relations

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS, DVUP

A study of the major factors underlying international relations, the causes of conflict and cooperation among international actors, the role of international institutions, the interactions of domestic and foreign policies, and major issues in security, economy and the environment.

0101	Calvert Jones	Seats (Total: 25)	
	MW 10:00am - 10:50am	TYD 0130	
	F 9:00am - 9:50am	TYD 2109	Discussion
0102	Calvert Jones	Seats (Total: 25)	
	MW 10:00am - 10:50am	TYD 0130	
	F 10:00am - 10:50am	TYD 2109	Discussion
0103	Calvert Jones	Seats (Total: 25)	
	MW 10:00am - 10:50am	TYD 0130	
	F 12:00pm - 12:50pm	TYD 1132	Discussion
0104	Calvert Jones	Seats (Total: 25)	
	MW 10:00am - 10:50am	TYD 0130	
	F 9:00am - 9:50am	TYD 1108	Discussion
0105	Calvert Jones	Seats (Total: 25)	
	MW 10:00am - 10:50am	TYD 0130	
	F 10:00am - 10:50am	TYD 1108	Discussion
0106	Calvert Jones	Seats (Total: 25)	
	MW 10:00am - 10:50am	TYD 0130	
	F 12:00pm - 12:50pm	SKN 1112	Discussion

0107	Calvert Jones MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 25) TYD 0130 TYD 2108	Discussion
0108	Calvert Jones MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 25) TYD 0130 TYD 1108	Discussion
0109	Calvert Jones MW 10:00am - 10:50am F 12:00pm - 12:50pm	Seats (Total: 25) TYD 0130 TYD 1108	Discussion
FC01	Jiun-Da Lin TuTh 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 40) TYD 1101	

GVPT201

Scope and Methods for Political Science Research

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP

Credit only granted for: GVPT100 or GVPT201. Formerly: GVPT100.

An introduction to empirical research in political science.

0101	Sarah Croco MW 1:00pm - 1:50pm F 9:00am - 9:50am	Seats (Total: 25) TYD 0117 TYD 0111	Discussion
0102	Sarah Croco MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 25) TYD 0117 TYD 0111	Discussion
0103	Sarah Croco MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 25) TYD 0117 TYD 1108	Discussion
0201	Sarah Croco MW 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 25) LEF 2205 TYD 1114	Discussion

0202	Sarah Croco MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 25) LEF 2205 TYD 1114	Discussion
0203	Sarah Croco MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) LEF 2205 TYD 1118	Discussion
0204	Sarah Croco MW 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 25) LEF 2205 TYD 1101	Discussion
0205	Sarah Croco MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 25) LEF 2205 TYD 1101	Discussion
0206	Sarah Croco MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) LEF 2205 SKN 1115	Discussion

GVPT205S

Special Topics in International Ethics, Conflict, and Immigration

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS, DVUP

Prerequisite: GVPT105. Recommended: GVPT241. Restriction: Must be in College Park Scholars program; and must be in GVPT international Studies program.

An examination of issues in international ethics, conflict generated at the international level, and problems in immigration policy and law, including theories of rights and immigration, and ideological sources of international violence.

0101	Richard Boyd Tu 2:00pm - 3:15pm Th 2:00pm - 3:15pm	Seats (Total: 26) ESJ 1224 TYD 1118	Discussion
0102	Richard Boyd Tu 2:00pm - 3:15pm Th 2:00pm - 3:15pm	Seats (Total: 25) ESJ 1224 EDU 3233	Discussion
0103	Richard Boyd Tu 2:00pm - 3:15pm Th 2:00pm - 3:15pm	Seats (Total: 26) ESJ 1224 HBK 0105	Discussion

0104	Richard Boyd	Seats (Total: 25)	
	Tu 2:00pm - 3:15pm	ESJ 1224	
	Th 2:00pm - 3:15pm	TYD 0101	Discussion

GVPT217 Mock Trial

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with MLAW217. Credit only granted for: MLAW217, GVPT217, or GVPT319A. Formerly: GVPT319A.

Experience the excitement and reward of arguing, and perhaps winning your client's case in court. Mock Trial is designed for students who are interested in learning practical techniques for shaping the evidence, using the law, and exploiting the courtroom to create a coherent and convincing case theory

[Click here for course permission.](#)

0101	William Mundy	Seats (Total: 40)	
	W 6:30pm - 9:15pm	TYD 1102	

GVPT241 The Study of Political Philosophy: Ancient and Modern

Credits: 3 Grading Method: Regular, General Education: DSSP
Pass-Fail, Audit

Examines some of the salient continuities and breaks between the ancient and modern traditions in Western political philosophy.

0101	Sujith Kumar, James Glass	Seats (Total: 25)	
	TuTh 2:00pm - 2:50pm	TYD 0130	
	F 9:00am - 9:50am	EDU 2119	Discussion
0102	Sujith Kumar, James Glass	Seats (Total: 25)	
	TuTh 2:00pm - 2:50pm	TYD 0130	
	F 10:00am - 10:50am	EDU 2119	Discussion
0103	James Glass, Sujith Kumar	Seats (Total: 25)	
	TuTh 2:00pm - 2:50pm	TYD 0130	
	F 9:00am - 9:50am	TYD 2106	Discussion
0104	James Glass, Sujith Kumar	Seats (Total: 25)	
	TuTh 2:00pm - 2:50pm	TYD 0130	
	F 10:00am - 10:50am	TYD 2106	Discussion

0105	James Glass, Sujith Kumar TuTh 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 25) TYD 0130 TYD 0111	Discussion
0106	James Glass, Sujith Kumar TuTh 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) TYD 0130 TYD 1114	Discussion
0107	James Glass, Sujith Kumar TuTh 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 25) TYD 0130 TYD 1132	Discussion
0108	James Glass, Sujith Kumar TuTh 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 25) TYD 0130 JMZ 0208	Discussion
FC01	Sujith Kumar TuTh 4:30pm - 5:45pm	Seats (Total: 30) TYD 2109	

GVPT258B Introduction to Political Science Topics in Study Abroad; Enemy Within: Spies and Espionage in the Cold War

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258C Introduction to Political Science Topics in Study Abroad; Government and Politics in China

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258D Introduction to Political Science Topics in Study Abroad; Danish Politics and Society

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT258E	Introduction to Political Science Topics in Study Abroad; Government and Politics in Spain Credits: 3 Grading Method: Regular, Pass-Fail, Audit <i>The study of topics in political science taken as part of an approve study abroad program.</i> Contact department for information to register for this course.
GVPT258F	Introduction to Political Science Topics in Study Abroad; European Union Law and Economic Integration Credits: 3 Grading Method: Regular, Pass-Fail, Audit <i>The study of topics in political science taken as part of an approve study abroad program.</i> Contact department for information to register for this course.
GVPT258I	Introduction to Political Science Topics in Study Abroad; Government and Politics in Italy and Europe Credits: 3 Grading Method: Regular, Pass-Fail, Audit <i>The study of topics in political science taken as part of an approve study abroad program.</i> Contact department for information to register for this course.
GVPT258N	Introduction to Political Science Topics in Study Abroad; Arms Control in the Nuclear Realm Credits: 3 Grading Method: Regular, Pass-Fail, Audit <i>The study of topics in political science taken as part of an approve study abroad program.</i> Contact department for information to register for this course.
GVPT258P	Introduction to Political Science Topics in Study Abroad; Sustainable Development: Environmental, Political and Social Issues Credits: 3 Grading Method: Regular, Pass-Fail, Audit <i>The study of topics in political science taken as part of an approve study abroad program.</i> Contact department for information to register for this course.
GVPT258R	Introduction to Political Science Topics in Study Abroad; Peace and Conflict Honors Seminar II: Regional Conflicts Credits: 3 Grading Method: Regular, Pass-Fail, Audit <i>The study of topics in political science taken as part of an approve study abroad program.</i>

Contact department for information to register for this course.

GVPT258T Introduction to Political Science Topics in Study Abroad; Terrorism and Political Violence

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The study of topics in political science taken as part of an approve study abroad program.

Contact department for information to register for this course.

GVPT273 Introduction to Environmental Politics

Credits: 3 Grading Method: Regular, General Education: DSSP
Pass-Fail, Audit

An overview of modern environmental philosophy, politics, and policy, exploring environmental politics in the US by way of comparison with other developed and developing countries.

FC01	Matthew Regan	Seats (Total: 30)
	MW 4:30pm - 5:45pm	HBK 0109

Restricted to students in Freshmen Connection.

GVPT280 The Study of Comparative Politics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An introduction to the comparative study of politics and governance, including the analytical concepts for studies of politics and a survey of the major types of regimes, including democratic and authoritarian/communist regimes.

0101	Mary Kate Schneider	Seats (Total: 20)
	MW 10:00am - 10:50am	SHM 2102
	F 9:00am - 9:50am	TYD 1118 Discussion

0102	Mary Kate Schneider	Seats (Total: 20)
	MW 10:00am - 10:50am	SHM 2102
	F 10:00am - 10:50am	TYD 2111 Discussion

0103	Mary Kate Schneider	Seats (Total: 20)
	MW 10:00am - 10:50am	SHM 2102
	F 1:00pm - 1:50pm	LEF 1171 Discussion

0104	Mary Kate Schneider	Seats (Total: 20)	
	MW 10:00am - 10:50am	SHM 2102	
	F 9:00am - 9:50am	JMZ 2206	Discussion
0105	Mary Kate Schneider	Seats (Total: 20)	
	MW 10:00am - 10:50am	SHM 2102	
	F 10:00am - 10:50am	JMZ 2207	Discussion
0106	Mary Kate Schneider	Seats (Total: 20)	
	MW 10:00am - 10:50am	SHM 2102	
	F 1:00pm - 1:50pm	JMZ 3203	Discussion

GVPT289B Special Topics in Government and Politics; Globalization

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Substantive issues of and theoretical approaches to political phenomenon. Topics and credit vary.

Contact department for information to register for this course.

GVPT289J Special Topics in Government and Politics; Uncertain Partners: US and China in a Changing World

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit SCIS

Substantive issues of and theoretical approaches to political phenomenon. Topics and credit vary.

0101	Scott Kastner	Seats (Total: 20)	
	MW 1:00pm - 1:50pm	JMZ 0220	
	F 9:00am - 9:50am	EDU 1121	Discussion
0102	Scott Kastner	Seats (Total: 20)	
	MW 1:00pm - 1:50pm	JMZ 0220	
	F 10:00am - 10:50am	EDU 1121	Discussion
0103	Scott Kastner	Seats (Total: 20)	
	MW 1:00pm - 1:50pm	JMZ 0220	
	F 1:00pm - 1:50pm	TYD 1102	Discussion
0104	Scott Kastner	Seats (Total: 20)	
	MW 1:00pm - 1:50pm	JMZ 0220	
	F 9:00am - 9:50am	LEF 1171	Discussion

0105	Scott Kastner	Seats (Total: 20)	
	MW 1:00pm - 1:50pm	JMZ 0220	
	F 10:00am - 10:50am	LEF 1171	Discussion
0106	Scott Kastner	Seats (Total: 20)	
	MW 1:00pm - 1:50pm	JMZ 0220	
	F 1:00pm - 1:50pm	TYD 1132	Discussion

GVPT289O
Special Topics in Government and Politics; Racial and Ethnic Politics in the Obama Era

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHS,
DVUP, SCIS

Substantive issues of and theoretical approaches to political phenomenon. Topics and credit vary.

0101	Antoine Banks	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	SHM 2102	
	F 9:00am - 9:50am	BPS 1238	Discussion
0102	Antoine Banks	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	SHM 2102	
	F 10:00am - 10:50am	BPS 1238	Discussion
0103	Antoine Banks	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	SHM 2102	
	F 1:00pm - 1:50pm	PLS 1115	Discussion
0104	Antoine Banks	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	SHM 2102	
	F 9:00am - 9:50am	PLS 1184	Discussion
0105	Antoine Banks	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	SHM 2102	
	F 10:00am - 10:50am	PLS 1184	Discussion
0106	Antoine Banks	Seats (Total: 20)	
	TuTh 11:00am - 11:50am	SHM 2102	
	F 1:00pm - 1:50pm	TYD 1101	Discussion

GVPT289X
Special Topics in Government and Politics; Introduction to European Union

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Substantive issues of and theoretical approaches to political phenomenon. Topics and credit vary.

Contact department for information to register for this course.

GVPT306 Global Environmental Politics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GVPT200. Restriction: Restriction: Must be in one of the following programs (Government & Politics; Government & Politics: International Relations) ; or permission of BSOS-Government & Politics department.

Focus on three processes of international environmental policy development- identifying problems, negotiating solutions, and implementing agreements- through a range of case studies, including global climate change.

Restriction: Must be in Government & Politics program, Government & Politics: International Relations program, or ENSP: Environmental Politics & Policy program.

0101	Caitlin McCulloch	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	TYD 1132

GVPT309H Topics in International Relations; British Politics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The study of topics in international relations.

Contact department for information to register for this course.

GVPT319D Topics in Social Advocacy; Careers in Government and Politics

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Reading, research and discussion of variety of topics related to social advocacy.

An overview of careers in government and politics. We will discuss human resource rules and processes specific to the government along with career tracks in the federal government (executive, legislative, and judicial), state & local government, running for office and working on campaigns and lobbying.

0101	Sarah Wolek	Seats (Total: 30)
	M 12:00pm - 12:50pm	TYD 1114

GVPT319E Topics in Social Advocacy; Careers in International Relations

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Reading, research and discussion of variety of topics related to social advocacy.

An overview of careers in international relations. We will discuss United State Government opportunities (State Department and USAID), international organizations (United Nations), humanitarian aid organizations, development organizations (NGOs and banks), and private sector IR opportunities (consulting and corporations). Class will include guest panelists from these sectors.

0101	Sarah Wolek	Seats (Total: 30)
	M 1:00pm - 1:50pm	TYD 1114

GVPT354 International Development and Conflict Management

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Enrollment is restricted to students in the Minor in International Development and Conflict Management; and permission of BSOS-Government & Politics department; and sophomore standing or higher. Additional information: Students are expected to take the course during the Fall semester after admission to the program.

Serves as the gateway course for the Minor in International Development and Conflict Management. Provides an introductory foundation in the theory and practice of international development and conflict management. Introduces the structures, key players, intersections, and main trends in the evolution of the fields. Explores causal factors that drive economic growth, poverty, inequality, and conflict, as well as the resources, methods, and tools available to track and address these issues.

0101	Stacy Kosko	Seats (Total: 25)
	W 2:00pm - 3:40pm	JMZ 0220
	F 9:00am - 9:50am	KNI 1103 Discussion
0102	Stacy Kosko	Seats (Total: 25)
	W 2:00pm - 3:40pm	JMZ 0220
	F 10:00am - 10:50am	KNI 1103 Discussion
0103	Stacy Kosko	Seats (Total: 25)
	W 2:00pm - 3:40pm	JMZ 0220
	F 12:00pm - 12:50pm	SQH 1105 Discussion

GVPT356 Capstone in International Development

(Perm req)

Credits: 3 Grading Method: Regular, General Education: DSSP,
Pass-Fail, Audit DVCC

Prerequisite: GVPT354. Restriction: Enrollment is restricted to students in the Minor in International Development and Conflict Management; and sophomore standing or higher; and permission of BSOS-Government & Politics department.

Serves as one of the two capstone courses for the Minor in International Development and Conflict Management. Focuses on advanced theory and the practice and profession of international development and is designed to provide students an introduction to, and a chance to engage with, a core set of practical skills relevant to the field.

0101	Stacy Kosko	Seats (Total: 31)
	Tu 2:00pm - 4:45pm	ESJ B0322

GVPT358A Study Abroad Seminar in Political Science; Migration and Multiculturalism in Europe

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT358D Study Abroad Seminar in Political Science; Politics and Economy of Spain

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT358F Study Abroad Seminar in Political Science; Government and Politics in France

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT358G Study Abroad Seminar in Political Science; History and Politics of Modern Italy: The 20th Century

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT358P Study Abroad Seminar in Political Science; Political Rhetoric: Blogs, Speeches, and Spin

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT358R Study Abroad Seminar in Political Science; Religion and Politics in Europe

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The study of topics in political science.

Contact department for information to register for this course.

GVPT368B Special Topics in Government and Politics; The United States and Israel: Likely or Unlikely Allies?

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The study of topics in government and politics.

Cross-listed with ISRL329N and PLCY388N. Credit granted for GVPT368B, ISRL329N or PLCY388N.

0101	Scott Lasensky	Seats (Total: 35)
	W 4:00pm - 6:30pm	SQH 1117

GVPT368L Special Topics in Government and Politics; African-American Politics from Frederick Douglass to Barack Obama

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The study of topics in government and politics.

Jointly offered with AASP499P and PLCY388B. Credit only granted for AASP499P, GVPT368L, or PLCY388B.

0101	Jonathan England	Seats (Total: 30)
	Tu 3:30pm - 6:00pm	LEF 1201

GVPT376 Applied Field Research in Government and Politics

(Perm req)

Credits: 3-6 Grading Method: Sat-Fail

Prerequisite: GVPT170. Corequisite: GVPT377.

Students in this course participate as interns in an agency of government or in some other appropriate political organization. Assignments are arranged to provide students with insights into both theoretical and practical aspects of politics. Under the tutelage of the host agency and an academic advisor, students conduct a major research project of mutual interest to the student and his or her host agency in the field of government and politics.

Contact department for information to register for this course.

GVPT386

Experiential Learning

(Perm req)

Credits: 3-6

Grading Method: Regular,
Pass-Fail

Restriction: Permission of BSOS-Government & Politics department; and junior standing or higher.

Contact department for information to register for this course.

GVPT388

Topical Investigations

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Independent research and writing on selected topics in government and politics.

Permission of Director of Undergraduate Studies required.

Contact department for information to register for this course.

GVPT388F

Topical Investigations; Foreign Policy Decision Making

(Perm req)

Credits: 2

Grading Method: Regular,
Pass-Fail, Audit

Independent research and writing on selected topics in government and politics.

This is a new course that combines lectures on campus in College Park with a study abroad component based in Havana, Cuba. The lectures on campus at UMD will focus on different strategies for studying foreign policy decision making. These include approaches that leverage rational decision making processes, psychological models of decision-making, and various pathologies of decision making as they apply to foreign policy decision. Once the semester is over, the class will travel to Cuba to learn about several foreign policy events that shaped much of the Cold War and post Cold War foreign policy of the United States in this region. These include the sinking of the USS Maine which precipitated the Spanish American War, the Bay of Pigs crisis which is a classic case of a failed US foreign policy, the Cuban Missile Crisis, and the current foreign relations between the United States and Cuba. The estimated cost associated with the travel and stay in Cuba is between 2 to 3 thousand. Financial aid and/or need-based scholarships may be available. For permission to register or more course information, contact the instructor at wlr@umd.edu. Students must complete both GVPT388F and the winter study abroad course in order to earn GVPT major credit.

0101	William Reed	Seats (Total: 20)
	F 2:00pm - 4:45pm	TYD 0111

GVPT388M

Topical Investigations; Mock Trial

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Independent research and writing on selected topics in government and politics.

0101	William Mundy	Seats (Total: 40)
	W 6:30pm - 9:15pm	TYD 1114

GVPT388W

Topical Investigations; Experiential Learning: Maryland, Public Policy, and Beyond

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Independent research and writing on selected topics in government and politics.

Three required in-class meetings on the following Tuesdays from 6:30pm-9:15pm: September 3rd, October 22nd, and December 3rd. All other class meetings will be online. Students interested in registering for this course must have an internship secured and must apply to the GVPT Internship Program; the application is available at the link below.

0101	SoRelle Gaynor	Seats (Total: 40)
	Class time/details on ELMs	ONLINE
	Contact instructor or department for details.	

GVPT389

Experiential Learning II

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail, Audit

Experiential credit for working in government & politics related internships, research, and teaching opportunities.

Junior standing.

Contact department for information to register for this course.

GVPT392

Introduction to Geographic Information Systems for Social Science Research

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: GVPT392, GVPT429A, or GVPT729D. Formerly: GVPT429A, GVPT729D.

Introduction to the use of Geographic Information Systems for conducting research in the social sciences. Overview of spatially embedded nature of many social science phenomena and content of theories common to spatial thinking. Students will obtain hands-on experience with various GIS tools and methods most frequently employed by social scientists.

0101	James Gimpel	Seats (Total: 30)
	TuTh 9:30am - 10:45am	TYD 1102

GVPT396
Introduction to Honors Research

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in Government & Politics Honors Program; and must have permission of the Government & Politics Honors Program.

A required course for all honors students designed to emphasize library research, methodology, and writing skills in political science and political philosophy. A written proposal, bibliography and research design for an honors paper required of all students as a final project.

Contact department for information to register for this course.

GVPT397
Honors Research

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: GVPT396. Restriction: Must be in Government & Politics Honors Program.

Individual reading and research. Preparation of an original paper.

Contact department for information to register for this course.

GVPT399C
Seminar in Government and Politics; The Case of Catalonia

 Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399D
Seminar in Government and Politics; Society and Politics in Contemporary Spain

 Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399I Seminar in Government and Politics; Globalization

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399L Seminar in Government and Politics; British Politics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399N Seminar in Government and Politics; Political Movements in the European Union

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT399X Seminar in Government and Politics; Political Movements in the European Union

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, research, discussion, analysis, and writing in the area of politics. Both substantive issues and methodological approaches will be considered. Primarily for government and politics undergraduate majors.

Contact department for information to register for this course.

GVPT409A Seminar in International Relations and World Politics; Peace, Justice, and Conflict Resolution

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Gabriella Lloyd	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	TYD 2106

GVPT409D Seminar in International Relations and World Politics; Immigration and Crossing Borders: Causes, Consequences, and New Questions

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Brandon Ives	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	KEY 0102

GVPT409E Seminar in International Relations and World Politics; International Relations of East Asia

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Scott Kastner	Seats (Total: 30)
	TuTh 9:30am - 10:45am	TYD 1118

GVPT409H Seminar in International Relations and World Politics; Corporations and the Global Political Economy

(Perm req) Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Prerequisite: GVPT200. Restriction: Must be in the Government and Politics Honors Program. The course will examine corporations as political actors in global politics, analyzing power, norms and governance in different issue areas.

0101	Virginia Haufler	Seats (Total: 20)
	MW 1:00pm - 2:15pm	LEF 1221

GVPT409M Seminar in International Relations and World Politics; Nationalism and Ethnic Conflict

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics Program or Government & Politics: International Relations program.

0101	Kathleen Cunningham	Seats (Total: 30)
	TuTh 9:30am - 10:45am	TYD 0101

GVPT409N Seminar in International Relations and World Politics; Nonviolent Resistance in the International System

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Kathleen Cunningham	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	TYD 0101

GVPT409R Seminar in International Relations and World Politics; Political Economy of Foreign Aid

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Shannon Carcelli	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	TYD 1101

GVPT409V Seminar in International Relations and World Politics; Game Theory And International Security

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in international relations and world politics. Both substantive issues and methodological approaches will be considered.

Contact department for information to register for this course.

GVPT417 Seminar in Advanced Topics in Environmental Policy Analysis

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GVPT273. Restriction: Must be in one of the following programs (Government & Politics; Environmental Sci&Policy-Env Politics & Policy). Credit only granted for: GVPT419B or GVPT417. Formerly: GVPT419B.

A series of critical tools and methods used to analyze environmental policy. This class should be of interest to students who are either considering a career or graduate studies in environmental protection.

0101	Isabella Alcaniz	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	SQH 1117

GVPT420 The Logic and Practice of Measuring Political Behavior

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GVPT201. Restriction: Must be in Government & Politics program; or must be in Government & Politics: International Relations program.

Introduction to concepts and practices used for measuring political behavior. Political analysis is an increasingly quantitative field. It is crucial for students of political behavior to learn how to define concepts in concrete ways, examine different methods of measuring concepts, learn how to test the quality of chosen measures, learn how to construct richer measures out of multiple questions, and finally how to examine the relationship between multiple measures of similar concepts. Common pitfalls, errors, bias, and ethics will be examined along the way.

0101	Lilliana Mason	Seats (Total: 30)
	Tu 2:00pm - 4:45pm	TYD 2108

GVPT423 Elections and Electoral Behavior

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GVPT241 and GVPT170. Restriction: Must be in Government & Politics program.

An examination of various topics relating to elections; the focus includes the legal structure under which elections are conducted, the selection and nomination process, the conduct of election campaigns, and patterns of political participation and voting choice in different types of elections.

0101	James Gimpel	Seats (Total: 30)
	Tu 2:00pm - 4:45pm	TYD 0101

GVPT429E Problems in Political Behavior; Public Opinion and Partisanship

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The problem approach to political behavior with emphasis on theoretical and empirical studies on selected aspects of the political process.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program. This course is an advanced seminar on voters in the American political system. Broadly, we will cover topics ranging from what factors influence how individuals vote to discussions of social groups, partisanship, opinions, and other characteristics that shape Americans as political actors.

0101	Lilliana Mason	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	TYD 0111

GVPT431 Introduction to Constitutional Law

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GVPT170 and GVPT331. Restriction: Must be in one of the following programs (Government & Politics; Government & Politics: International Relations) ; and junior standing or higher.

A systematic inquiry into the general principles of the American constitutional system, with special reference to the role of the judiciary in the interpretation and enforcement of the federal constitution.

Jointly offered with MLAW358X. Credit only granted for GVPT431 or MLAW35 8X.

0101	Martin Kobren	Seats (Total: 70)
	MW 1:00pm - 2:15pm	TYD 2109

GVPT439B Seminar in Public Law; First Amendment: Free Speech, Religion, and the Constitution

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in public law. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program. Credit only granted for GVPT439B or MLAW358F. Prerequisite: GVPT431 or GVPT432.

0101	Michael Spivey	Seats (Total: 35)
	MW 3:00pm - 4:15pm	SQH 1120

GVPT439C Seminar in Public Law; Current Issues in the Supreme Court

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in public law. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program. Prerequisite: GVPT431 or GVPT432. Credit only granted for GVPT439C or MLAW358C.

0101	Michael Spivey	Seats (Total: 35)
	MW 1:00pm - 2:15pm	TYD 1101

GVPT439E Seminar in Public Law; Cities, Crimes, and the Constitution

Credits: 3 Grading Method: Regular

Reading, writing, and research on topics in public law. Both substantive issues and methodological approaches will be considered.

Jointly offered with MLAW358N. Credit granted for GVPT439E or MLAW358N.

0101	Robert Koulish, Thiruvendran Vignarajah	Seats (Total: 120)
	Tu 3:30pm - 6:00pm	ASY 2203

GVPT443**Contemporary Political Theory**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GVPT241. Restriction: Must be in Government & Politics program.

A survey of the principal political theories and ideologies set forth in the works of writers from Karl Marx to the present.

Contact department for information to register for this course.

GVPT454H**Seminar in the International Relations of China**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GVPT200. Restriction: Must be in Government & Politics program; and junior standing or higher. Or must be in Government & Politics: International Relations program; and junior standing or higher.

Explores the foreign relations behavior of the People's Republic of China, with focus on the contemporary era.

Restriction: Must be in the Government and Politics Honors program.

0101	Margaret Pearson	Seats (Total: 20)
	W 2:00pm - 4:45pm	TYD 2108

GVPT456**The Politics of Terrorism**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GVPT200. Restriction: Must be in Government & Politics program; or must be in Government & Politics: International Relations program. Credit only granted for: GVPT456 or GVPT459T. Formerly: GVPT459T.

Examination of the definition, causes and organization of terrorist activity, along with key domestic and international counter- and anti-terrorism responses. Special emphasis on challenges and opportunities to the scientific study of terrorism.

0101	Kanisha Bond	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	TYD 2110
0201	Kanisha Bond	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	TYD 2106

GVPT457**American Foreign Relations**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GVPT200. Restriction: Must be in Government & Politics program; and junior standing or higher.

The principles and machinery of the conduct of American foreign relations and an analysis of the major foreign policies of the United States.

0101	Shannon Carcelli	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	TYD 1101

GVPT458A**Special Topics in Study Abroad IV; Inequality, Poverty and Globalisation**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GVPT458G**Special Topics in Study Abroad IV; History and Politics of Modern Italy: The Twentieth Century**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GVPT458K**Special Topics in Study Abroad IV; Themes and Issues in Transatlantic Relations**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GVPT458Q**Special Topics in Study Abroad IV; Islam and Europe: Historical and Contemporary Dimensions**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GVPT458X**Special Topics in Study Abroad IV; European Legal Traditions**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GVPT458Z Special Topics in Study Abroad IV; Contemporary Germany in European Perspective

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

GVPT459A Seminar in Comparative Politics; Ethnic Politics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Brandon Ives	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	KEY 0125

GVPT459B Seminar in Comparative Politics; Comparative Political Institutions

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Prerequisite: GVPT280 or GVPT282. Restriction: Must be in Government and Politics program.

0101	Ernesto Calvo	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	TYD 1114

GVPT459E Seminar in Comparative Politics; Comparative Politics of the Middle East

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Calvert Jones	Seats (Total: 30)
	MW 3:00pm - 4:15pm	TYD 1101

GVPT459M Seminar in Comparative Politics; Social Movements

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Kanisha Bond	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	TYD 0102

GVPT459R Seminar in Comparative Politics; The Rise and Fall of Communism

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Vladimir Tismaneanu	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	TYD 1118

GVPT459T Seminar in Comparative Politics; Tweeting Political Crises

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Ernesto Calvo	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	TYD 1102

GVPT459X Seminar in Comparative Politics; Political Radicalism: Comparing Communism and Fascism

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in comparative politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in Government & Politics program or Government & Politics: International Relations program.

0101	Vladimir Tismaneanu	Seats (Total: 30)
	Th 2:00pm - 4:45pm	TYD 2108

GVPT460 State Politics and Government

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GVPT241 and GVPT170. Recommended: GVPT260. Restriction: Must be in Government & Politics program; or must be in Government & Politics: International Relations program.

A study of the structure, procedures and policies of state governments with special emphasis on intergovernmental relationships, and with illustrations from Maryland governmental arrangements.

0101	Richard Engstrom	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	SQH 2120

GVPT473 The U.S. Congress

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GVPT241 and GVPT170. Restriction: Junior standing or higher. And must be in Government & Politics program; or must be in Government & Politics: International Relations program.

A detailed survey of lawmaking and the legislative process, emphasizing the U.S. Congress, and its members.

0101	Kristina Miler	Seats (Total: 30)
	M 2:00pm - 4:45pm	TYD 0102

GVPT477**Voting and Participation**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GVPT170 and GVPT241. Restriction: Must be in Government & Politics program.

A study of the factors that influence individual vote choice and voter participation in the U.S. The course will introduce political science research pertaining to both topics and will engage current controversies over such things as political campaign laws and the various state and federal rules that govern election administration.

0101	Michael Hanmer	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	TYD 1102

GVPT479H**Seminar in American Politics; Presidential Elections**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in American politics. Both substantive issues and methodological approaches will be considered.

Restriction: Must be in the Government and Politics Honors program.

0101	David Karol	Seats (Total: 20)
	MW 2:00pm - 3:15pm	TYD 1108

GVPT479M**Seminar in American Politics; Political Science Survey Methods and Experience**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Reading, writing, and research on topics in American politics. Both substantive issues and methodological approaches will be considered.

Prerequisite: GVPT170 and GVPT201. Restriction: Must be in Government & Politics program or Government & Politics: International Relations program. For permission to register please send a statement of interest to Dr. Michael Hanmer at mhanmer@umd.edu. Surveys help us understand social problems, assess support for public policies, and explain political outcomes. Students will experience from beginning to the end the process of conducting survey research. This includes question wording, question placement, mechanisms for testing response time and survey length, and issues related to survey execution in the field. Students will then evaluate and analyze the survey data.

0101	Michael Hanmer	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	SKN 1112

GVPT482**Government and Politics of Latin America**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in Government & Politics program; or must be in Government & Politics: International Relations program.

A comparative study of the governmental systems and political processes of the Latin American countries.

0101	Isabella Alcaniz	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	SQH 1117

GVPT484**Government and Politics of Africa**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GVPT282 or GVPT280. Restriction: Must be in one of the following programs (Government & Politics; Government & Politics: International Relations).

A comparative study of the governmental systems and political processes of the African countries, with special emphasis on the problems of nation-building in emergent countries.

0101	John McCauley	Seats (Total: 30)
	MW 2:00pm - 3:15pm	TYD 0101

GVPT485**Government and Politics of the Middle East**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: GVPT200; and (GVPT282 or GVPT280). Restriction: Must be in Government & Politics program. Credit only granted for: GVPT485 or GVPT459E. Formerly: GVPT459E.

A comparative study of the governmental systems and political processes of Middle Eastern countries, with special emphasis on the problems of nation-building in emergent countries.

Contact department for information to register for this course.

GVPT599**Teaching Political Science**

Credits: 1 Grading Method: Regular,
Audit

Problems in teaching political science. Topics covered include lecture and discussion strategies, creation of an active learning environment, construction and evaluation of examinations, department and university policies, and dealing with various types of teaching problems. This course does not carry credit towards any degree at the University.

0101	Kathleen Cunningham	Seats (Total: 20)
	Contact instructor or department for details.	

GVPT622 Quantitative Methods For Political Science

Credits: 3 Grading Method: Regular,
Audit

Introduction to quantitative methods of data analysis, with emphasis on statistical methods and computer usage. Measures of association, probability, correlation, linear regression estimation techniques, introductory analysis of variance, and use of package computer programs.

Course will meet in the LeFrak OASIS lab. For GVPT majors only.

0101	David Cunningham	Seats (Total: 12)
	M 2:00pm - 4:45pm	LEF 0229
	F 2:00pm - 4:00pm	LEF 0229 Discussion

GVPT708A Seminar in International Relations Theory; International Relations Theory

Credits: 3 Grading Method: Regular,
Audit

An examination of the major approaches, concepts, and theories in the study of world politics with special emphasis on contemporary literature.

0101	Gabriella Lloyd	Seats (Total: 12)
	Tu 9:30am - 12:15pm	TYD 1111

GVPT718A Selected Topics in Political Science; Professionalization and Academic Skills in Grant Writing, Publishing, Giving Talks, and Reviewing

Credits: 3 Grading Method: Regular,
Audit

Selected topics in the field of political science.

0101	Paul Huth	Seats (Total: 12)
	Tu 9:30am - 12:15pm	TYD 1136

GVPT729A Special Topics in Quantitative Political Analysis; Advanced Maximum Likelihood Estimation

Credits: 3 Grading Method: Regular,
 Audit

An intensive examination of special topics in quantitative methods of political analysis in such areas as survey research methods, exploratory data analysis, advanced data management techniques, or advanced methods of policy analysis.

0101	William Reed	Seats (Total: 12)
	Th 5:00pm - 7:45pm	ESJ B0320

GVPT761 International Political Economy

Credits: 3 Grading Method: Regular,
 Audit

Recommended: GVPT708.

Major issues in international political economy including such matters as the monetary system, trade, debt, and development.

0101	Todd Allee	Seats (Total: 12)
	Tu 12:30pm - 3:15pm	TYD 1136

GVPT770 Seminar in American Political Institutions

Credits: 3 Grading Method: Regular,
 Audit

This is the core institutions seminar in American politics. The course surveys the primary literature in the field and addresses substantively significant topics related to the study of political institutions in the American context.

0101	David Karol	Seats (Total: 12)
	M 6:00pm - 8:45pm	TYD 1111

GVPT780 Seminar in the Comparative Study of Politics

Credits: 3 Grading Method: Regular,
 Audit

An examination of the salient approaches to and conceptual frameworks for the comparative study of politics, followed by the construction of models and typologies of political systems.

0101	John McCauley	Seats (Total: 12)
	Th 9:30am - 12:15pm	TYD 1136

GVPT799**Master's Thesis Research**

Credits: 1-6

Grading Method: Regular

Contact department for information to register for this course.

GVPT849**Readings in Government and Politics**

(Perm req)

Credits: 3

Grading Method: Regular,
Audit*Guided readings and discussions on selected topics in political science.***Contact department for information to register for this course.**

GVPT870**Interest Groups Politics in the United States**

Credits: 3

Grading Method: Regular,
Audit*Recommended: GVPT770.**The theory and practice of interest group politics in the United States.*

0101	Kristina Miler	Seats (Total: 12)
	W 12:30pm - 3:15pm	TYD 1111

GVPT888I**Selected Topics in Comparative Governmental Institutions; The Politics of Identity**

Credits: 3

Grading Method: Regular,
Audit*An examination of special topics in comparative politics.*

0101	Johanna Birnir	Seats (Total: 12)
	Th 12:30pm - 3:15pm	TYD 1111

GVPT898**Pre-Candidacy Research**

Credits: 1-8

Grading Method: Regular

*Guided readings and discussions on selected topics in political science.***Contact department for information to register for this course.**

GVPT899**Doctoral Dissertation Research**

(Perm req)

Credits: 6

Grading Method: Regular

Contact department for information to register for this course.

HACS100**Foundations in Cybersecurity I**

Credits: 2

Grading Method: Regular

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program.

Interdisciplinary foundational course of the ACES program. Through lectures, lab activities, and discussions, students will learn and practice various aspects of cybersecurity. Weekly technical lectures will introduce students to the operating system UNIX. Students will partner with the Division of Information Technology in a project to engage the University of Maryland community in a cyber-hygiene and cyber-ethics campaign based on the concepts learned in class.

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program.

0101	Jandelyn Plane	Seats (Total: 35)
	M 9:00am - 9:50am	PFR 1111
	W 9:00am - 9:50am	PFR 1111
0201	Jandelyn Plane	Seats (Total: 35)
	M 10:00am - 10:50am	PFR 1111
	W 10:00am - 10:50am	PFR 1111
0301	Jandelyn Plane	Seats (Total: 35)
	M 11:00am - 11:50am	PFR 1111
	W 11:00am - 11:50am	PFR 1111

HACS200**Applied Cybersecurity Foundations II**

Credits: 2

Grading Method: Regular

General Education: DSSP

Prerequisite: Minimum grade of C- in HACS101. Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program.

Students will apply the skills learned in HACS 100 and 101 to practice cybersecurity research through team led projects employing honeypots, carrying that project through all stages - proposal, implementation, and analysis. Weekly lectures will supplement project work by addressing trends observed in honeypot attacks and protections needed, along with data collection and analysis tools, and other foundational cybersecurity concepts.

Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program.

0101	Zhi Lin, Michel Cukier Tu 3:30pm - 5:10pm	Seats (Total: 45) PFR 1111
0201	Zhi Lin, Michel Cukier Th 3:30pm - 5:10pm	Seats (Total: 40) PFR 1111

HACS201

Introduction to UNIX

Credits: 1 Grading Method: Regular

Restriction: Must be a first-year student in the ACES (Advanced Cybersecurity Experience for Students) Minor Program. Credit only granted for: HACS201 or CMSC216. Additional information: Required course for students who have not completed the ACES Living-Learning Program or taken CMSC216.

Introduction to the operating system UNIX through lectures and hands-on assignments.

0101	Jandelyn Plane F 9:00am - 9:50am	Seats (Total: 25) PFH 0103
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HACS208M

Seminar in Cybersecurity; Project Management Techniques for IT Professional

Credits: 3 Grading Method: Regular

Explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. Although each section may focus on a different topic, each integrates active student engagement, communication, critical communication, critical thinking, and teamwork.

Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program.

0101	Firoozeh Rahimian TuTh 9:30am - 10:45am	Seats (Total: 25) PFR 1111
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HACS208N

Seminar in Cybersecurity; Seminar in Cybersecurity; Digital Forensics

Credits: 3 Grading Method: Regular General Education: DSSP

Explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. Although each section may focus on a different topic, each integrates active student engagement, communication, critical communication, critical thinking, and teamwork.

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program.

0101	Marcelle Lee	Seats (Total: 23)
	Th 4:00pm - 6:45pm	LEF 1171
<i>Must be a student in the ACES Honors Program</i>		

HACS208P Seminar in Cybersecurity; Beyond Technology, the Policy Implications of Cyberspace

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

Explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. Although each section may focus on a different topic, each integrates active student engagement, communication, critical communication, critical thinking, and teamwork.

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program.

0101	Charles Harry	Seats (Total: 22)
	TuTh 12:30pm - 1:45pm	PFR 1111

HACS279 Undergraduate Research in Cybersecurity

(Perm req) Credits: 1-3 Grading Method: Regular

The Advanced Cybersecurity Experience for Students (ACES) program encourages its students to engage in research in order to gain greater insight into a specific area within cybersecurity, obtain an appreciation for the subtleties and difficulties associated with the production of knowledge and fundamental new applications, and to prepare for graduate school and the workforce.

Contact department for information to register for this course.

HACS287 Undergraduate Research in Cybersecurity

(Perm req) Credits: 3 Grading Method: Regular General Education: DSSP

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program; and permission of UGST-HCOL-ACES Cybersecurity Program.

The Advanced Cybersecurity Experience for Students (ACES) program encourages its students to engage in research in order to gain greater insight into a specific area within cybersecurity, obtain an appreciation for the subtleties and difficulties associated with the production of knowledge and fundamental new applications, and to prepare for graduate school and the workforce.

Contact department for information to register for this course.

HACS297 Cybersecurity Experience Reflection

(Perm req) Credits: 3 Grading Method: Regular

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Living-Learning Program; and permission of UGST-HCOL-ACES Cybersecurity Program.

Cybersecurity experience is defined as an experiential learning activity either with a University of Maryland entity (such as the Division of Information Technology, the ACES competition team or in an ACES outreach program), or with an external organization that will provide valuable, hands-on experience to supplement the knowledge learned in the other ACES coursework.

Permission of department required.

0101	Morgan Lanahan, Amy Andrade	Seats (Total: 25)
	M 4:00pm - 6:45pm	PFR 1111

HACS408E Advanced Seminar in Cybersecurity; Applied Reverse Engineering

(Perm req)

Credits: 3 Grading Method: Regular

Explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. Although each section may focus on a different topic, each integrates active student engagement, communication, critical communication, critical thinking, and teamwork.

Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Minor Program.

0101	Drake Petersen	Seats (Total: 20)
	M 6:00pm - 8:45pm	PFR 0103

HACS408L Advanced Seminar in Cybersecurity; Analytical and Forensic Techniques for Cybersecurity

Credits: 3 Grading Method: Regular

Explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. Although each section may focus on a different topic, each integrates active student engagement, communication, critical communication, critical thinking, and teamwork.

Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Minor Program.

0101	Mark Haney	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	PFR 1111

HACS479 Undergraduate Research in Cybersecurity

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

The Advanced Cybersecurity Experience for Students (ACES) program encourages its students to engage in research in order to gain greater insight into a specific area within cybersecurity, obtain an appreciation for the subtleties and difficulties associated with the production of knowledge and fundamental new applications, and to prepare for graduate school and the workforce.

Contact department for information to register for this course.

HACS498

(Perm req)

Cybersecurity Group Problem Solving

Credits: 3

Grading Method: Regular

The Advanced Cybersecurity Experience for Students (ACES) program encourages its students to engage in team problem solving activities in order to gain greater insight into a specific area within cybersecurity and to obtain an appreciation for the subtleties and difficulties associated with these activities in order to prepare students for graduate school and the workforce. Students engage in a semester long problem solving or development project under the mentorship of a industry specialist and with the guidance of university faculty. Through the exercise the students will develop teamwork experience and professional communication skills in addition to experience of the project itself. The project might be evaluation, creation, testing or analysis of some area of cybersecurity as needed by the mentor-sponsor. A contract of what will be accomplished is required must be agreed upon by the mentor, the student and the ACES leadership before the project can begin.

Restriction: Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Minor Program.

0101	Michel Cukier, Philip D'Ambrosio	Seats (Total: 10)
	Contact instructor or department for details.	
0201	Ryan Kranz, Darren King, Marcel Nguyen, Michel Cukier, Gouthum Karadi	Seats (Total: 10)
	Contact instructor or department for details.	
0401	Michel Cukier, Kelly Wong	Seats (Total: 10)
	Contact instructor or department for details.	

HDCC**Design Cultures and Creativity****Fall 2019****HDCC105****Introduction to Digital Cultures and Creativity I**

Credits: 2

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in the Digital Cultures and Creativity Honors College Living/Learning program.

History, concepts, and technologies of creative digital expression, coupled with an introduction to development for particular platforms and devices.

0101	Jason Farman	Seats (Total: 70)
	TuTh 4:00pm - 5:15pm	PFR 1105

HDCC208B Seminar in Digital Cultures and Creativity; Digital Storytelling

Credits: 3 Grading Method: Regular, General Education: DSSP
 Pass-Fail, Audit

An advanced seminar in specific aspects of digital culture and creativity, designed to keep students abreast of the latest developments in new media and the online world. Possible topics include mobile gaming, digital storytelling, and electronic music.

Restriction: Must be in the Digital Cultures and Creativity Honors College Living/ Learning program.
 Prerequisite: HDCC105 and HDCC106.

0101	Porter Olsen	Seats (Total: 13)
	MW 12:30pm - 1:45pm	PFR 0111

HDCC208E Seminar in Digital Cultures and Creativity; Speculating Social Justice

Credits: 3 Grading Method: Regular, General Education: DSSP
 Pass-Fail, Audit

An advanced seminar in specific aspects of digital culture and creativity, designed to keep students abreast of the latest developments in new media and the online world. Possible topics include mobile gaming, digital storytelling, and electronic music.

0101	Alexis Lothian	Seats (Total: 13)
	TuTh 2:00pm - 3:15pm	PFR 0111

HDCC208I Seminar in Digital Cultures and Creativity; 3D Modeling in the Humanities

Credits: 3 Grading Method: Regular, General Education: DSSP
 Pass-Fail, Audit

An advanced seminar in specific aspects of digital culture and creativity, designed to keep students abreast of the latest developments in new media and the online world. Possible topics include mobile gaming, digital storytelling, and electronic music.

0101	DB Bauer	Seats (Total: 13)
	Th 4:00pm - 6:40pm	PFR 0111

HDCC208N Seminar in Digital Cultures and Creativity; Innovations in Images and Technology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSSP

An advanced seminar in specific aspects of digital culture and creativity, designed to keep students abreast of the latest developments in new media and the online world. Possible topics include mobile gaming, digital storytelling, and electronic music.

Must be in the Digital Cultures and Creativity Honors College Living/Learning program. Prerequisite: HDCC105 and HDCC106.

0101	Evan Golub	Seats (Total: 13)
	TuTh 12:30pm - 1:45pm	WDS 1131

HDCC208Z Seminar in Digital Cultures and Creativity; Hacking the Creative Process

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSSP

An advanced seminar in specific aspects of digital culture and creativity, designed to keep students abreast of the latest developments in new media and the online world. Possible topics include mobile gaming, digital storytelling, and electronic music.

0101	Joel Chan	Seats (Total: 13)
	W 4:00pm - 6:40pm	PFR 0111

HDCC379 Digital Cultures and Creativity Independent Study

(Perm req)

Credits: 3 Grading Method: Regular

Involves research and/or creative scholarship directed by individual DCC faculty outside of the formal classroom structure.

0101	Jessica Lu	Seats (Total: 7)
	Contact instructor or department for details.	

HEBR Hebrew Fall 2019

HEBR106 Intensive Elementary Hebrew I

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Assessment (FLPA) score. Credit only granted for: HEBR111 or HEBR106.

An intensive study of fundamentals of Hebrew reading, writing, listening and Israeli culture. Covers present tense in all verb categories, basic syntax and builds vocabulary.

0101	Avital Karpman	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	JMZ 2120
	Class time/details on ELMs	ONLINE
0201	Avital Karpman	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	JMZ 3122
	Class time/details on ELMs	ONLINE

HEBR112

Elementary Hebrew II

Credits: 6 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: HEBR111; or must have appropriate Foreign Language Placement Test (FLPT) score.

Restriction: Must not have completed HEBR103; and must not have completed HEBR104. Credit only granted for: (HEBR103 and HEBR104) or HEBR112.

Continuation of HEBR 111.

Contact department for information to register for this course.

HEBR206

Intermediate Intensive Hebrew I

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed HEBR107 OR HEBR112; or must have appropriate Foreign Language Placement Assessment (FLPA) score. Restriction: Must not be a fluent/native speaker of Hebrew. Credit only granted for: HEBR206 or HEBR211.

Provides a comprehensive review of the fundamentals of Hebrew grammar and oral skills, and introduces new skills in future tense verb conjugation, and communication in reading, writing, listening and speaking.

0101	Avital Karpman	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	JMZ 2120
	Class time/details on ELMs	ONLINE

HEBR212

Intermediate Hebrew II

Credits: 6 Grading Method: Regular, CORE: HO
Pass-Fail, Audit

Prerequisite: HEBR211; or permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must not have completed HEBR203; and must not have completed HEBR204. Credit only granted for: (HEBR203 and HEBR204) or HEBR212.

Continuation of HEBR211.

Contact department for information to register for this course.

HEBR249M Special Topics in Hebrew Studies; Israeli Music

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A broad range of cultural and societal topics pertaining to the communication of Hebrew.

Taught in Hebrew. An examination of important Israeli musical artists and genres and their impact on Israeli society and culture.

0101	Aliza Sandalon	Seats (Total: 15)
	Class time/details on ELMs	ONLINE

HEBR313 Conversation and Composition I

Credits: 3 Grading Method: Regular, General Education: DSHU
Pass-Fail, Audit

Prerequisite: HEBR212; or students who have taken courses with comparable content may contact the department.

A practical language course recommended for all students continuing with Hebrew. Review of grammar and composition. Selected readings. Oral and written exercises.

0101	Aliza Sandalon	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

HEBR369A Special Topics in Study Abroad III; Hebrew Lower Advanced

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

HEBR369C Special Topics in Study Abroad III; Hebrew Upper Advanced

Credits: 6 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

HEBR369D Special Topics in Study Abroad III; Hebrew Upper Intermediate

Credits: 6 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

HEBR386 Experiential Learning

(Perm req) Grading Method: Regular,
Credits: 3-6 Pass-Fail

Restriction: Must have a Learning Proposal approved by the Office of Experiential Learning Programs, faculty sponsor, and student's internship sponsor; and junior standing or higher.

Contact the department to obtain section numbers.

Contact department for information to register for this course.

HEBR499 Independent Study in Hebrew

(Perm req) Credits: 1-3 Grading Method: Regular

Independent study under faculty supervision.

Contact the department to obtain section numbers.

Contact department for information to register for this course.

HEIP Entrepreneurship and Innovation Fall 2019

HEIP143 Foundations of Entrepreneurship and Innovation

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in the Entrepreneurship and Innovation Program (EIP).

Foundational ideas and terms in entrepreneurship and innovation are introduced, with attention to developing students understanding of cultivating a business in diverse, global environments; leading and collaborating in a competitive world; developing an entrepreneurial mind for an entrepreneurial world; and industry dynamics of technological innovation.

0101	Jay Smith	Seats (Total: 120)
	M 5:00pm - 5:50pm	ATL 2324

HEIP240 Exploring International Entrepreneurship and Innovation

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP

Restriction: Must be an EIP student in good-standing.

An introduction to the opportunities and challenges of entrepreneurship and innovation from an international perspective.

0101	Jay Smith, John Jabara TuTh 12:30pm - 1:45pm	Seats (Total: 36) LPA 0100
0201	Jay Smith, John Jabara TuTh 3:30pm - 4:45pm	Seats (Total: 55) LPA 0100

HESI Higher Ed, Student Affairs, and International Ed Policy

Fall 2019

HESI202 Race and Diversity in Higher Education

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHS,
SCIS

*Will discuss contemporary and controversial issues on race and diversity in higher education.
Addresses the question: How should race influence college admissions and campus climate? Will
expose students to different viewpoints on the role of race in higher education settings.*

0101	Julie Park Th 1:00pm - 3:30pm	Seats (Total: 30) HBK 0103
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HESI217 Introduction to Student Leadership

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP

Restriction: Freshman standing; or sophomore standing.

*Introduction to leadership theories, concepts, and skills. Completion of personal and leadership self-
assessments, values exploration, and small group application.*

Students must pay a \$32 materials fee.

0201	Genevieve Hildebrand TuTh 2:00pm - 3:15pm	Seats (Total: 25) TWS 1321
0301	Ashley Hixson MW 11:00am - 12:15pm	Seats (Total: 25) TWS 1321

0401	Shakia Asamoah MW 2:00pm - 3:15pm	Seats (Total: 25) TWS 1321
FC01	Genevieve Hildebrand TuTh 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 20) EDU 2119
FC02	Ashley Hixson MW 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 20) JMZ 2120

HESI220

Adaptive Strategies for Multicultural Leadership and Dialogue

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DVCC

Restriction: Must not have completed BSCV301; and junior standing or lower. Credit only granted for: EDCP318L or HESI220. Formerly: EDCP318L.

As U.S. society becomes increasingly complex along multiple and continually evolving dimensions of individual and group identities, successful leaders will benefit from learning adaptive strategies and practices that will help them to navigate this complexity and adapt effectively in a climate of constant change. This class will focus on specific strategies, concepts, and insights for successful leadership and dialogue in twenty-first century U.S. multicultural society.

0101	Nicole Mehta TuTh 3:30pm - 4:45pm	Seats (Total: 25) KEY 0103
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HESI310

Transfer2Terp Learning Community: Applying Your Strengths at the University of Maryland and Beyond

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Priority will be given to students transferring from Maryland Community Colleges; or permission of EDUC-Counseling, Higher Education and Special Education department.

Students will identify their strengths and learn how to apply them both in and outside of the classroom. Students will work side by side with the faculty and staff in the Adele H. Stamp Student Union to learn about their strengths while applying them to leadership positions.

0101	Donna Lim MW 11:00am - 12:15pm	Seats (Total: 16) SSU 0110
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0201	David Reese	Seats (Total: 16)
	TuTh 11:00am - 12:15pm	SSU 0110
0301	Cori Carfagno	Seats (Total: 16)
	TuTh 12:30pm - 1:45pm	SSU 0110

HESI315 Student Leadership in Groups and Organizations

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: HESI217. Credit only granted for: HESI315 or EDCP315. Formerly: EDCP315.

Acquiring and integrating leadership knowledge within group and organizational contexts so that students can navigate organizational environments and apply leadership in diverse communities of practice and career contexts.

Email leadershipstudies@umd.edu for permission to enroll. Students must pay a \$15 materials fee.

0301	Noel Kuriakos	Seats (Total: 20)
	MW 11:00am - 12:15pm	TWS 1320
0501	Noel Kuriakos	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	EGR 1110

HESI318D Applied Contextual Leadership; Greek Community Dialogues

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Course will utilize experiential learning opportunities to develop and apply the knowledge and skills of leadership into specific contexts of leadership practice.

Student must be on a Greek governing council executive board to enroll. They can contact the instructor at msupple@umd.edu for more information about registering.

0101	Matthew Supple, Lindsey Templeton	Seats (Total: 30)
	Th 4:00pm - 7:00pm	Location: TBA

HESI318J Applied Contextual Leadership; Leadership and Sports

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Course will utilize experiential learning opportunities to develop and apply the knowledge and skills of leadership into specific contexts of leadership practice.

0101	Terry Zacker	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	PLS 1117

HESI318M Applied Contextual Leadership; Leadership and Education

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Course will utilize experiential learning opportunities to develop and apply the knowledge and skills of leadership into specific contexts of leadership practice.

This course will explore public education policy in the United States, including historical context, the achievement gap, school funding, standardized testing, and alternatives to the current public education system. It will also explore the meaning of leadership in an educational context and advocacy for change within this context. All students enrolled in the course must commit six hours per week of the semester to work with the America Reads, America Counts, or Partners in Print program and must receive permission to enroll by contacting Alison Barlow at abarlow@umd.edu Visit www.arac.umd.edu for more information about AR*AC*PNP programs.

0101	Alison Barlow	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

HESI318N Applied Contextual Leadership; Leadership in Collaborative Learning Groups

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Course will utilize experiential learning opportunities to develop and apply the knowledge and skills of leadership into specific contexts of leadership practice.

Restricted to students selected to participate in the Guided Study Sessions through the Counseling Center.

0101	Danielle Pafe	Seats (Total: 20)
	Th 3:30pm - 4:45pm	ASY 3217
	Contact instructor or department for details.	
0201	Danielle Pafe	Seats (Total: 20)
	W 5:00pm - 6:15pm	HBK 0125
	Contact instructor or department for details.	

HESI318T Applied Contextual Leadership; Foundations and Applications of Adventure Leadership Instruction

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Course will utilize experiential learning opportunities to develop and apply the knowledge and skills of leadership into specific contexts of leadership practice.

Permission of Instructor. Contact Amanda Even (ameven@umd.edu) to arrange an interview. This course is designed to help students develop the necessary leadership skills for leading participants and groups in various adventure recreation activities. The course will focus on developing technical skills, leadership abilities, judgement and decision-making abilities, and overall knowledge of best practices for recreating in the natural environment.

0101	Amanda Preperato	Seats (Total: 8)
	W 6:00pm - 9:00pm	ERC B0170E

HESI320

Social Action Seminar

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: HESI217. Restriction: Limited to Minor in Leadership Studies students.

The use of leadership theories to inform the practice of addressing social issues in society, on campus, or within the surrounding community. Students will: identify a current and compelling social issue; explore the historical, social, and political aspects of social issues; identify and select applicable leadership theories to confront the social issue; create and develop a plan that integrates leadership theories and the social issue; and implement and evaluate the overall social action project.

0101	William Post	Seats (Total: 15)
	Class time/details on ELMs	ONLINE
	Contact instructor or department for details.	

HESI418D

Special Topics in Leadership; Leadership and Ethnicity

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DVCC

The special topics and leadership course will address a single topic related to leadership through the semester. In-depth study and analysis on the topic will be the basis for the course. Topics include gender and leadership, ethics and leadership, and culture and leadership. Leadership will serve as the foundation in the course.

0101	Brandon Dula	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	JMZ 0125

HESI418F

Special Topics in Leadership; Jewish Leadership

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

General Education: DVCC

The special topics and leadership course will address a single topic related to leadership through the semester. In-depth study and analysis on the topic will be the basis for the course. Topics include gender and leadership, ethics and leadership, and culture and leadership. Leadership will serve as the foundation in the course.

0101	Ari Israel	Seats (Total: 35)
	M 2:00pm - 4:45pm	TYD 2108

HESI498 Special Problems in Higher Education, Student Affairs, and International Education Policy

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Available only to HESI students who have formal plans for individual study of approved problems.

Contact department for information to register for this course.

HESI671 Intergroup Dialogue Facilitation Practicum

Credits: 3 Grading Method: Regular

Prerequisite: EDCP616 and HESI771; or permission of instructor. Restriction: Limited to HESI Student Affairs Concentration students only. Credit only granted for: EDCP671 or HESI671. Formerly: EDCP671.

Developing knowledge and skills for facilitating intergroup dialogues. Using the principles and content of intergroup dialogues to create scenarios for the practice of listening, understanding, and taking action under theories of social justice.

0101	Alison Mojto	Seats (Total: 13)
	M 4:15pm - 7:00pm	TWS 1320

HESI672 Individual and Organizational Assessment in Student Affairs

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: EDCP672 or HESI672. Formerly: EDCP672.

An examination of the scholarship and practice of assessment of college student learning and developmental outcomes as well as organizational practices that contribute to those outcomes.

0101	Kristan Skendall	Seats (Total: 20)
	W 4:15pm - 7:00pm	TWS 1313

HESP120**Introduction to Linguistics**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: SB

General Education: DSHS,
DSSP

Additional information: HESP120 is required for HESP majors. HESP majors may not substitute LING200.

An introduction to the scientific study of natural language with focus on the basic concepts of phonology, syntax, semantics and pragmatics, with subsequent attention to the applied aspects of linguistic principles.

0101	Jose Ortiz	Seats (Total: 45)
	TuTh 12:30pm - 1:45pm	VMH 1207
0201	Michelle Morrison	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm	CSI 2107
FC01	Dominique Mwepu	Seats (Total: 30)
	TuTh 6:00pm - 7:15pm	TYD 2110
<i>Restricted to students in Freshmen Connection.</i>		

HESP150**Introduction to Language Science**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Language science is the scientific study of how humans acquire, use, comprehend, and produce language. Most people in all societies learn and use their native language or languages with apparent ease - but don't be fooled: languages are highly complex, and speaking and understanding language requires some amazing feats of mental acrobatics. Thus there are many opportunities for difficulties with language, which is the focus of our field. Understanding difficulties with speech, language, and hearing require first understanding how processing works when language is successful - the psychological (behavioral) and neurobiological (brain) factors that enable people to learn and use language despite its intricacies, the structure and properties of language itself, and how knowledge of language is acquired, represented, and processed in the mind and brain.

PBH1	Kristina Kubistal-Meeks	Seats (Total: 50)
	Th 6:30pm - 9:00pm	ASY 2309
<i>Restricted to students in the Hearing and Speech Sciences In The Evening program.</i>		

HESP202**Introduction to Hearing and Speech Sciences**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An introduction to communication sciences and disorders; a survey of the bases of normal speech, language and hearing ability, major forms of communicative disorders and their treatment.

0101	Kathleen Skinker	Seats (Total: 100)
	TuTh 11:00am - 12:15pm	LEF 2205

HESP214 Should I Buy That?:Comparing Media Claims with Scientific Evidence from Brain & Behavior Research

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

Millions of dollars are spent each year advertising products that "make you smarter" or "learn a foreign language faster" or "increase your memory", etc. But are these statements true? Can they be backed up? Learn how to critically evaluate media claims of new discoveries in brain and behavior. Read popular-press articles, listen to podcast episodes and review commercial products that claim to be based on science. Then, learn how to find out if the claims are true.

0101	Jared Novick	Seats (Total: 45)
	TuTh 11:00am - 12:15pm	ARC 1103
FC02	Alison Robey	Seats (Total: 30)
	TuTh 4:30pm - 5:45pm	ASY 3211
<i>Restricted to students in Freshmen Connection.</i>		

HESP300 Introduction to Psycholinguistics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP202; or permission of BSOS-Hearing & Speech Sciences department. Recommended: HESP120.

An introduction to current theories of language and an investigation of their relationship to human communication behavior. Survey of the experimental literature relating to this question.

0101	Jared Novick	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm	SKN 0104

HESP305 Anatomy and Physiology of the Speech Mechanism

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP202; or permission of BSOS-Hearing & Speech Sciences department.

Anatomy, physiology, and neurology of speech mechanism.

0101	Tammatha O'Brien	Seats (Total: 52)
	TuTh 11:00am - 12:15pm	CSI 3117

HESP386 Experiential Learning

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail

Restriction: Junior standing or higher; and permission of BSOS-Hearing & Speech Sciences department.

Students will have the opportunity observe and/or participate in therapy activities provided by a speech-language pathologist or audiologist in this experiential learning course.

Contact department for information to register for this course.

HESP388 Undergraduate Research Externship

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Off-campus research internship with departmental affiliates at National Institutes of Health and regional universities. Contact department chairman for openings and descriptions of eligible placements.

Contact department for information to register for this course.

HESP389 LEAP Classroom Internship

Credits: 1-3 Grading Method: Regular

Participation in a language-based, literacy-rich preschool classroom for children with speech-language disorders. Students will learn behavior management techniques, curriculum planning and implementation, facilitation of play among children, data collection and teaching strategies.

Contact department for information to register for this course.

HESP400 Speech and Language Development in Children

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP300; or permission of BSOS-Hearing & Speech Sciences department. Recommended: LING200 or HESP120. Restriction: Must be in Hearing and Speech Sciences program; or permission of BSOS-Hearing & Speech Sciences department.

Analysis of the normal processes of speech and language development in children.

0101	Yi Ting Huang	Seats (Total: 45)
	TuTh 9:30am - 10:45am	TYD 0117
PBH1	Tonya Williams-Walker	Seats (Total: 50)
	Tu 6:00pm - 8:30pm	TWS 1100
<i>Restricted to students in the Hearing and Speech Sciences In The Evening program.</i>		

HESP403

Introduction to Phonetic Science

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP305; or permission of BSOS-Hearing & Speech Sciences department. Restriction: Must be in Hearing and Speech Sciences program; or permission of BSOS-Hearing & Speech Sciences department.

An introduction to physiological, acoustic and perceptual phonetics; broad and narrow phonetic transcription; current models of speech production and perception.

0101	Margaritis Fourakis	Seats (Total: 45)
	TuTh 9:30am - 10:45am	TYD 0102

HESP406

Acquired Neurogenic Communication Disorders in Adults

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP300 and HESP305; or permission of BSOS-Hearing & Speech Sciences department. Restriction: Must be in Hearing and Speech Sciences program; or permission of BSOS-Hearing & Speech Sciences department.

Survey of the dysarthrias and aphasias in adults from an interdisciplinary point of view.

0101	Kathleen Skinker	Seats (Total: 50)
	TuTh 12:30pm - 1:45pm	TWS 1100

HESP411

Introduction to Audiology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HESP311; or permission of BSOS-Hearing & Speech Sciences department. Restriction: Must be in Hearing and Speech Sciences program; or permission of BSOS-Hearing & Speech Sciences department.

An introduction to the field of audiology. Evaluation and remediation of hearing handicaps.

0101	Sarah Sohns	Seats (Total: 50)
	MW 3:30pm - 4:45pm	ESJ 2212
PBH1	Christopher Zalewski	Seats (Total: 25)
	M 6:00pm - 8:30pm	TYD 2111
<i>Restricted to students in the Hearing and Speech Sciences In The Evening program.</i>		

HESP413 Aural Rehabilitation/Habilitation

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: HESP411. Restriction: Sophomore standing or higher.

The fundamental aspects of aural rehabilitation therapy for both adults and children are introduced to students. Class time will consist of lectures, discussions, and hands-on activities.

PBH1	Gavin Mahoney	Seats (Total: 25)
	W 6:00pm - 8:30pm	TWS 0236
<i>Restricted to students in the Hearing and Speech Sciences In The Evening program.</i>		

HESP415 Principles and Methods in Speech-Language Pathology

Credits: 2 Grading Method: Regular

Prerequisite: HESP400. Restriction: Must be in Hearing and Speech Sciences program.

The principles and methods required to provide treatment of speech and language disorders to children and adults. Topics include writing goals and objectives, programming, teaching strategies, session design, data collection, behavior modification and counseling.

0101	Eliza Thompson	Seats (Total: 30)
	W 1:00pm - 2:45pm	SQH 2120

HESP416 Principles and Methods in Audiology

(Perm req) Credits: 2 Grading Method: Regular

Prerequisite: Minimum grade of C- in HESP411. Restriction: Must be in Hearing and Speech Sciences program; and permission of BSOS-Hearing & Speech Sciences department.

Relate previous knowledge of anatomy/physiology and pathologies of the auditory system and integrate this information into clinical application.

0101	Lisa Rickard	Seats (Total: 25)
	Th 3:00pm - 4:45pm	HBK 1112

HESP469 Honor Thesis Research

Credits: 1-3 Grading Method: Regular

Student will develop thesis proposal, conduct research, analyze results, develop and defend final written document.

Contact department for information to register for this course.

HESP469A Honor Thesis Research

Credits: 1-3 Grading Method: Regular

Student will develop thesis proposal, conduct research, analyze results, develop and defend final written document.

Contact department for information to register for this course.

HESP469B Honor Thesis Research

Credits: 1-3 Grading Method: Regular

Student will develop thesis proposal, conduct research, analyze results, develop and defend final written document.

Contact department for information to register for this course.

HESP498 Seminar

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Selected topics in human communication and its disorders.

Contact department for information to register for this course.

HESP499 Independent Study; Topics in the Hearing and Speech Sciences

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail

A directed study of selected topics pertaining to human communication and its disorders.

Contact department for information to register for this course.

HESP499H Independent Study

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

A directed study of selected topics pertaining to human communication and its disorders.

Contact department for information to register for this course.

HESP600 Instrumentation in Hearing and Speech Sciences

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in Clinical Audiology: Au.D. or Ph.D. (Doctoral) program; and permission of BSOS-Hearing & Speech Sciences department. Or permission of instructor.

Types and principles of operation of electronic equipment used in the hearing and speech sciences.

Offered Fall only.

0101	Zilong Xie	Seats (Total: 10)
	W 3:30pm - 6:00pm	SQH 1125

HESP603 Seminar in Cultural and Linguistic Diversity in Communication Disorders

Credits: 1 Grading Method: Regular

Restriction: Must be in Hearing and Speech Sciences: M.A. (Master's) program; or permission of Instructor. Additional information: Course meets over four semesters for the duration of the Masters of Speech-Language Pathology program.

Overview of cultural and linguistic diversity (CLD) in general, and the impact of CLD on communication, communication disorders, and the professional practice of Speech-Language Pathology

0101	Eusabia Mont	Seats (Total: 25)
	F 1:00pm - 2:30pm	Location: TBA

HESP606 Basic Hearing Measurements

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: HESP411; or students who have taken courses with comparable content may contact the department. Restriction: Must be in Clinical Audiology: Au.D. or Ph.D. (Doctoral) program; and permission of BSOS-Hearing & Speech Sciences department. Or permission of instructor.

Theoretical principles, methodology, and interpretation of routine audiometric tests, including pure tone, speech, and acoustic immittance measures. Modification of procedures for special populations. Equipment calibration and mass hearing screening programs.

0101	Sandra Gordon-Salant	Seats (Total: 30)
	Th 3:30pm - 6:00pm	LEF 0135

HESP610 Language Disorders in Adults

Credits: 2 Grading Method: Regular,
Audit

Restriction: Must be in Hearing and Speech Sciences: M.A. (Master's) program; or permission of instructor.

Etiology, diagnosis and management of language problems of adults associated with aging, brain injury and degenerative conditions.

0101	Yasmeen Shah	Seats (Total: 30)
	Meets October 14, 2019 - December 9, 2019	
	Tu 2:00pm - 5:20pm	LEF 0135

HESP613 Autism Spectrum Disorders

Credits: 2 Grading Method: Regular,
Audit

Restriction: Must be in Hearing and Speech Sciences: M.A. (Master's) program; or permission of instructor. Credit only granted for: HESP639A or HESP613. Formerly: HESP639A.

Etiology, diagnosis and management of autism spectrum disorders.

0101	Vivian Sisskin	Seats (Total: 34)
	Meets October 14, 2019 - December 9, 2019	
	Tu 9:30am - 12:50pm	LEF 0135

HESP616 Language Disorders in the Pre-school Age

(Perm req) Credits: 2 Grading Method: Regular, Audit

Prerequisite: HESP400; or students who have taken courses with comparable content may contact the department. Restriction: Must be in Hearing and Speech Sciences: M.A. (Master's) program; and permission of BSOS-Hearing & Speech Sciences department. Or permission of instructor.

Theoretical, empirical and clinical perspectives on language disorders in children from infancy through pre-school age.

0101	Nan Ratner	Seats (Total: 20)
	Meets August 26, 2019 - October 12, 2019	
	Tu 9:30am - 12:50pm	LEF 0135

HESP624 Voice Disorders

(Perm req)

Credits: 2 Grading Method: Regular,
Audit

Restriction: Permission of BSOS-Hearing & Speech Sciences department; or must be in Hearing and Speech Sciences: M.A. (Master's) program.

Etiological characteristics, assessment and treatment of phonatory disorders in children and adults.

0101	Nancy Solomon	Seats (Total: 20)
	Meets August 26, 2019 - October 11, 2019	
	W 6:15pm - 9:00pm	LEF 0135
	Class time/details on ELMs	ONLINE

HESP626 Language disorders in school-aged children and adolescents

Credits: 2 Grading Method: Regular,
Audit

Etiology, assessment and treatment of communication and learning problems in school age children and adolescents

0101	Nan Ratner	Seats (Total: 20)
	Meets October 14, 2019 - December 9, 2019	
	Tu 4:00pm - 7:20pm	LEF 1221

HESP630 Electrophysiological Measurements

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: HESP606. Restriction: Must be in Clinical Audiology: Au.D. or Ph.D. (Doctoral) program; and permission of BSOS-Hearing & Speech Sciences department. Or permission of instructor.

Principles and techniques of physiological and electrophysiological measures of the audio-vestibular mechanisms.

Offered fall only.

0101	Samira Anderson	Seats (Total: 10)
	W 3:30pm - 6:00pm	LEF 1220

HESP638**Research Practicum**

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

Analysis, synthesis and integration of knowledge related to current research or clinical issues in human communication and its related disorders.

Contact department for information to register for this course.

HESP639D**Special Topics in Hearing and Speech Sciences**

Credits: 2 Grading Method: Regular,
Audit

Intensive coverage of selected topics of current interest.

0101	Yvette McCoy	Seats (Total: 20)
	M 5:00pm - 6:40pm	KEY 0124

HESP645**Pediatric Audiology**

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: HESP606. Restriction: Must be in Clinical Audiology: Au.D. or Ph.D. (Doctoral) program; and permission of BSOS-Hearing & Speech Sciences department. Or permission of instructor.

Evaluation and treatment of hearing-impaired children.

Offered Fall only.

0101	Hannah Willison	Seats (Total: 10)
	M 6:00pm - 8:30pm	LEF 0135

HESP648A**Clinical Practice in Speech; Diagnostic Procedures**

(Perm req)

Credits: 1 Grading Method: Regular

Supervised training in the application of clinical methods in the diagnosis and treatment of speech disorders.

2101	Vivian Sisskin Th 9:00am - 11:50am	Seats (Total: 5) LEF 0135	Lab
2301	Eliza Thompson Th 9:00am - 11:50am	Seats (Total: 5) LEF 0135	Lab
2701	Jose Ortiz Th 9:00am - 11:50am	Seats (Total: 5) LEF 0135	Lab
2801	Eusabia Mont Th 9:00am - 11:50am	Seats (Total: 5) LEF 0135	Lab
3601	Kristin Slawson Th 9:00am - 11:50am	Seats (Total: 5) LEF 0135	Lab
3701	Kathryn Dow-Burger Th 9:00am - 11:50am	Seats (Total: 5) LEF 0135	Lab

HESP648B

(Perm req)

Clinical Practice in Speech; Therapeutic Procedures

Credits: 1-2

Grading Method: Regular

Supervised training in the application of clinical methods in the diagnosis and treatment of speech disorders.

2101	Vivian Sisskin Th 12:00pm - 12:50pm	Seats (Total: 5) LEF 0135	Lab
2301	Eliza Thompson Th 12:00pm - 12:50pm	Seats (Total: 5) LEF 0135	Lab
2701	Jose Ortiz Th 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 5) LEF 0135 LEF 0135	Lab Lab
2801	Eusabia Mont M 9:30am - 10:50am	Seats (Total: 5) LEF 0135	Lab

3601	Kristin Slawson	Seats (Total: 5)	
	Th 12:00pm - 12:50pm	LEF 0135	Lab
3701	Kathryn Dow-Burger	Seats (Total: 5)	
	Th 12:00pm - 12:50pm	LEF 0135	Lab
	W 10:00am - 10:50am	LEF 0135	Lab

HESP649A Clinical Practice in Audiology; Diagnostic Audiology

(Perm req)

Credits: 1-2 Grading Method: Regular

Supervised training in the application of clinical methods in the diagnosis and treatment of hearing disorders.

Contact department for information to register for this course.

HESP649B Clinical Practice in Audiology; Aural Rehabilitation

(Perm req)

Credits: 1-2 Grading Method: Regular

Supervised training in the application of clinical methods in the diagnosis and treatment of hearing disorders.

Contact department for information to register for this course.

HESP700 Hearing Aids

Credits: 3 Grading Method: Regular,
Audit

Principles, methods and procedures for selection, fitting, calibration and management of amplification systems for hearing-impaired children and adults.

0101	Eric Hoover	Seats (Total: 10)	
	Tu 5:00pm - 7:30pm	LEF 1222	

HESP702 Diagnostic Procedures in Speech-Language Pathology

(Perm req)

Credits: 2 Grading Method: Regular,
Audit

Restriction: Must be in Hearing and Speech Sciences: M.A. (Master's) program; and permission of BSOS-Hearing & Speech Sciences department. Or permission of instructor.

Diagnostic tools and methods in the analysis of speech-language disorders in children and adults.

0101	Colleen Worthington	Seats (Total: 30)
	Meets August 26, 2019 - October 12, 2019	
	Tu 2:00pm - 5:20pm	LEF 0135

HESP708 Independent Study

(Perm req)

Credits: 1-6 Grading Method: Regular,
Audit

Individual research projects under guidance of a faculty member.

Contact department for information to register for this course.

HESP710 Industrial and Environmental Noise Problems

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of instructor.

Evaluation and control of noise hazards. Effects of noise on man. Medico-legal aspects of noise-induced hearing impairment.

0101	Eric Hoover	Seats (Total: 20)
	M 5:00pm - 7:30pm	KEY 0119

HESP712 Cochlear Implants and Other Implantable Technologies

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have completed or be concurrently enrolled in HESP700, HESP701, and HESP722; or permission of instructor.

Comprehensive presentation of cochlear implant design and processing, medical/surgical aspects, evaluation, programming, outcomes in children and adults, and post stimulation care. The role of the audiologist as a member of the cochlear implant team will be emphasized. Current and emerging trends in other implantable technologies also will be covered.

0101	Nicole Nguyen	Seats (Total: 10)
	M 2:00pm - 4:30pm	LEF 0104A

HESP722 Psychoacoustics

Credits: 3 Grading Method: Regular,
Audit

Auditory perception and auditory processing in normal and impaired hearing.

0101	Matthew Goupell	Seats (Total: 15)
	Tu 3:30pm - 6:00pm	JMZ 1224

HESP728 Advanced Clinical Practice in Speech; Advanced Graduate Laboratory Practicum in Speech-Language Pathology

(Perm req)

Credits: 1-8 Grading Method: Regular

Clinical internship in selected off-campus facilities.

Contact department for information to register for this course.

HESP729 Advanced Clinical Practice in Audiology; Advanced Graduate Laboratory Practicum in Audiology

(Perm req)

Credits: 1-8 Grading Method: Regular

Clinical internship in selected off-campus facilities.

1301	Nicole Nguyen	Seats (Total: 10)
	Contact instructor or department for details.	
	Contact instructor or department for details.	
3201	Nicole Nguyen	Seats (Total: 20)
	Contact instructor or department for details.	

HESP788 Graduate Research Externship

Credits: 1-3 Grading Method: Regular,
Audit

Off-campus research internship with departmental affiliates at National Institutes of Health and other regional universities. Contact department chairman for available placements, requirements and openings.

Contact department for information to register for this course.

HESP799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

HESP829 Clinical Internship Residency

Credits: 1-9 Grading Method: Regular,
Audit

Off-Campus, full-time (30-40 hours/week) clinical externship in Audiology at regional and national institutions.

1301	Nicole Nguyen	Seats (Total: 30)
Contact instructor or department for details.		
3201	Nicole Nguyen	Seats (Total: 10)
Contact instructor or department for details.		

HESP849**Capstone Research Project I**

Credits: 2 Grading Method: Regular

First of two-course sequence leading to the final research requirement for the Doctor of Audiology (Au.D.) degree; involves individual study and/or supervised lab work with mentor, preparation of research proposal (including IRB protocol if required), and attendance at Capstone Research Project Workshop.

Contact department for information to register for this course.

HESP859**Capstone Research Project II**

Credits: 1-2 Grading Method: Regular

Second of two-course sequence leading to the final research requirement for the Doctor of Audiology (Au.D.) degree; involves final data collection, analysis and presentation of results or completion of scholarly paper under the direction of the faculty mentor.

Contact department for information to register for this course.

HESP889**Doctoral Candidacy Research**

Credits: 1-3 Grading Method: Regular

Doctoral candidacy paper research

Contact department for information to register for this course.

HESP898**Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

HESP899**Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

HHUM105 Honors Humanities: Introduction to the Arts and Humanities

Credits: 3 Grading Method: Regular CORE: HL General Education: DSHU

Restriction: Must be an entering freshmen in the Honors Humanities Program. Credit only granted for: ARHU105 or HHUM105. Formerly: ARHU105.

Introduction to the university, the different fields of the arts and humanities, and the history of how the university and the humanities have evolved across the world from ancient times to the present. Primary emphasis on reading and discussion of literary artifacts to assess the meaning and social status of the arts and humanities in the past and their personal and social value for the future.

0101	Gregory Staley	Seats (Total: 19)
	Tu 3:30pm - 4:45pm	TWS 1310
	Th 3:30pm - 4:45pm	PLS 1158 Discussion
0102	Gregory Staley	Seats (Total: 19)
	Tu 3:30pm - 4:45pm	TWS 1310
	Th 3:30pm - 4:45pm	ANA 0120 Discussion
0103	Gregory Staley	Seats (Total: 19)
	Tu 3:30pm - 4:45pm	TWS 1310
	Th 12:30pm - 1:45pm	ANA 0120 Discussion
0104	Gregory Staley	Seats (Total: 19)
	Tu 3:30pm - 4:45pm	TWS 1310
	Th 2:00pm - 3:15pm	ANA 0120 Discussion

HHUM205 Second Year Seminar in Honors Humanities

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO General Education: DVUP

Credit only granted for: ARHU205 or HHUM205. Formerly: ARHU205.

Seminar on basic issues and methodologies in the humanities and arts.

0101	Kathleen Spanos	Seats (Total: 20)
	MW 3:30pm - 4:45pm	PAC 3730
	<i>Dancing in the World.</i>	

0102	Karin Roseblatt	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ANA 0120
	<i>History, Memory and Human Rights in Latin America.</i>	
0103	Sahar Khamis	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	SKN 1112
	<i>Digital Discourses in the Muslim World.</i>	

HHUM328 Internship in Honors Humanities

Credits: 1-3 Grading Method: Regular

Supervised service-learning in Honors Humanities.

0101	Sarah Humud	Seats (Total: 12)
	Contact instructor or department for details.	

HHUM329 Undergraduate Teaching Assistantship

Credits: 1-3 Grading Method: Regular

Supervised pedagogical service-learning in the Honors Humanities curriculum.

0101	Gregory Staley	Seats (Total: 8)
	Contact instructor or department for details.	

HISP Historic Preservation Fall 2019

HISP600 History, Theory, and Practice of Historic Preservation

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of ARCH-Historic Preservation Program.

An introduction to history, theory and practice of historic preservation covered through readings, discussions, presentations, class projects, and field trips.

0101	John Sprinkle	Seats (Total: 20)
	Th 7:00pm - 9:40pm	ARC 1117

HISP611 Historical Research Methods

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of ARCH-Historic Preservation Program. Credit only granted for: HISP610 or HISP611.

Research methods used by professional historic preservationists to identify and record historic structures and sites. Emphasizes inter/multidisciplinary nature of contemporary preservation practice using archival and ethnographic evidence as a basis for establishing significance.

Department permission required.

0101	Douglas McElrath	Seats (Total: 15)
	W 7:00pm - 9:40pm	ARC 1117

HISP629 Independent Studies in Historic Preservation

Credits: 1-3 Grading Method: Regular,
Audit

Individual Instruction course.

0101	Dennis Pogue	Seats (Total: 1)
	Contact instructor or department for details.	

HISP650 Historic Preservation Studio Workshop

(Perm req)

Credits: 6 Grading Method: Regular,
Audit

Prerequisite: HISP600; and permission of ARCH-Historic Preservation Program. Restriction: Must be in a major in ARCH-Historic Preservation Program.

Students carry out a group preservation project in a local community, from inception and problem formulation through completion. Guided carefully by a faculty team, students will conduct research, interact with communities, perform analyses, and propose solutions for an issue or problem of direct relevance to a local community and client group.

Department permission required.

0101	Paula Nasta	Seats (Total: 15)
	TuTh 4:00pm - 6:40pm	ARC 1117

HISP655 American Vernacular Architecture

(Perm req)

Credits: 4 Grading Method: Regular,
Audit

Prerequisite: Permission of ARCH-Historic Preservation Program. Credit only granted for: HISP655 or HISP619V. Formerly: HISP619V.

History, theory, and practice of American vernacular architecture including a review of common building technologies, structure, and style, and focusing on methods and approaches for recording, documenting and analyzing these historic resources.

Prerequisite: permission of department. Class will meet some sessions at Bostwick House.

0101	Dennis Pogue	Seats (Total: 15)
	Tu 7:00pm - 9:40pm	ARC 1117
	Contact instructor or department for details.	

HISP660 Internship in Historic Preservation

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of ARCH-Historic Preservation Program. Formerly: HISP619.

Students will secure a summer internship with an organization engaged in historic preservation work (this can be a public agency, nonprofit, or private firm). The students will formulate a plan of work and a series of pedagogical goals to satisfy both the practical needs of the project and the academic requirements for the course.

0101	Dennis Pogue	Seats (Total: 10)
	Contact instructor or department for details.	

HISP680 Preservation Economics

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of ARCH-Historic Preservation Program. Credit only granted for: HISP619N or HISP680. Formerly: HISP619N.

Students are introduced to a range of economic theories, methods, and issues that must be considered in the practice of historic preservation. Case studies related to community economic development, adaptive reuse, tax credit programs, project finance, and land use will be presented.

0101	Jeremy Wells	Seats (Total: 15)
	M 7:00pm - 9:40pm	ARC 1117

HISP701 Certificate Portfolio Project

(Perm req)

Credits: 1 Grading Method: Regular,
Audit

Prerequisite: Permission of ARCH-Historic Preservation Program.

Students will gather samples of their work and craft a synthetic statement on their experiences in their HISP certificate courses (for example, picking up on themes such as community involvement, diversity of practice, affordable housing, or sustainability), and the ways in which they have integrated historic preservation into their thinking and practice in their home discipline.

Department permission required.

0101	Dennis Pogue	Seats (Total: 10)
Contact instructor or department for details.		

HISP710 **Final Project in Historic Preservation I**

(Perm req)

Credits: 1 Grading Method: Regular,
Audit

Credit only granted for: HISP700 or HISP710. Formerly: HISP700.

An independent, applied research project investigating the preservation of a particular site or a specialized issue in historic preservation. This is part one of a two-semester sequence and involves developing the project proposal and bibliography.

Department permission required.

0101	Dennis Pogue	Seats (Total: 10)
	W 4:30pm - 6:00pm	ARC 1117

HISP711 **Final Project in Historic Preservation II**

(Perm req)

Credits: 2 Grading Method: Regular,
Audit

Credit only granted for: HISP700 or HISP711. Formerly: HISP700.

An independent, applied research project investigating the preservation of a particular site or a specialized issue in historic preservation. This is part two of a two semester sequence and involves project research and writing.

Department permission required.

0101	Dennis Pogue	Seats (Total: 10)
Contact instructor or department for details.		

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO General Education: DSHU

Interpretation of select literature and art of the ancient Mediterranean world with a view to illuminating the antecedents of modern culture; religion and myth in the ancient Near East; Greek philosophical, scientific, and literary invention; and the Roman tradition in politics and administration.

0101	Elizabeth Conner	Seats (Total: 24)	
	MW 10:00am - 10:50am	SYM 0200	
	W 2:00pm - 2:50pm	LEF 1220	Discussion
0102	Elizabeth Conner	Seats (Total: 24)	
	MW 10:00am - 10:50am	SYM 0200	
	W 11:00am - 11:50am	KEY 0126	Discussion
0103	Elizabeth Conner	Seats (Total: 24)	
	MW 10:00am - 10:50am	SYM 0200	
	W 1:00pm - 1:50pm	KEY 0126	Discussion

HIST111

The Medieval World

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH General Education: DSHS, DVUP

The development of Europe in the Middle Ages; the role of religious values in shaping new social, economic, and political institutions; medieval literature, art and architecture.

0101	Colleen Ho	Seats (Total: 24)	
	TuTh 2:00pm - 2:50pm	KEY 0106	
	Th 9:30am - 10:20am	LEF 1171	Discussion
0102	Colleen Ho	Seats (Total: 24)	
	TuTh 2:00pm - 2:50pm	KEY 0106	
	Th 12:30pm - 1:20pm	LEF 1171	Discussion
0103	Colleen Ho	Seats (Total: 24)	
	TuTh 2:00pm - 2:50pm	KEY 0106	
	F 2:00pm - 2:50pm	KEY 0125	Discussion
0104	Colleen Ho	Seats (Total: 24)	
	TuTh 2:00pm - 2:50pm	KEY 0106	
	F 9:00am - 9:50am	KEY 0121	Discussion

0105	Colleen Ho	Seats (Total: 24)	
	TuTh 2:00pm - 2:50pm	KEY 0106	
	F 12:00pm - 12:50pm	KEY 0121	Discussion
0106	Colleen Ho	Seats (Total: 24)	
	TuTh 2:00pm - 2:50pm	KEY 0106	
	F 1:00pm - 1:50pm	KEY 0100	Discussion

HIST120

Islamic Civilization

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH, D General Education: DSHU

Cross-listed with RELS120. Credit only granted for: HIST120 or RELS120.

Introduction to society and culture in the Middle East since the advent of Islam: as a personal and communal faith; as artistic and literary highlights of intellectual and cultural life; and as the interplay between politics and religion under the major Islamic regimes.

0101	Antoine Borrut	Seats (Total: 24)	
	MW 2:00pm - 2:50pm	SYM 0200	
	F 10:00am - 10:50am	TYD 2108	Discussion
0102	Antoine Borrut	Seats (Total: 24)	
	MW 2:00pm - 2:50pm	SYM 0200	
	F 11:00am - 11:50am	TYD 2108	Discussion
0103	Antoine Borrut	Seats (Total: 24)	
	MW 2:00pm - 2:50pm	SYM 0200	
	F 12:00pm - 12:50pm	TYD 2108	Discussion

HIST123

Sub-Saharan Africa Since 1800

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH, D General Education: DSHS, DVUP

Overviews early mid-19th-century changes in African societies, European conquest and African resistances in the late 19th-century, colonial states and societies, African nationalisms and decolonization and the independence era. Struggles over social, economic, and political changes are emphasized.

0101	Erin Mosely	Seats (Total: 40)	
	MW 2:00pm - 3:15pm	TYD 2110	

HIST131**The History of the American Dream**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: SH

General Education: DSHS,
SCIS*Credit only granted for: HIST131 or HIST289J. Formerly: HIST289J.*

An introduction to the way Americans thought of themselves in the past, and their often conflicting visions of what constituted the American Dream. Central questions will include whether or not Americans have always envisioned their country as a land of equality, opportunity, democracy, and freedom and whether or not their ideas of what these values meant changed or remained the same over time.

0101	Michael Ross	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	KEY 0106	
	F 9:00am - 9:50am	TLF 1103	Discussion
0102	Michael Ross	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	KEY 0106	
	F 10:00am - 10:50am	TLF 1103	Discussion
0103	Michael Ross	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	KEY 0106	
	F 11:00am - 11:50am	EDU 3233	Discussion
0104	Michael Ross	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	KEY 0106	
	F 12:00pm - 12:50pm	SQH 1101	Discussion
0105	Michael Ross	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	KEY 0106	
	F 1:00pm - 1:50pm	KEY 0116	Discussion
0106	Michael Ross	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	KEY 0106	
	F 2:00pm - 2:50pm	KEY 0116	Discussion

HIST132**Fighting Slavery**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: SH

General Education: DSHU,
SCIS

An examination of the different tools and tactics, means and methods that Americans have used to escape slavery or try to eliminate it.

0101	Richard Bell MW 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 24) ESJ 0224 KEY 0125	Discussion
0102	Richard Bell MW 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 24) ESJ 0224 TWS 1321	Discussion
0103	Richard Bell MW 11:00am - 11:50am Th 2:00pm - 2:50pm	Seats (Total: 24) ESJ 0224 WDS 1114	Discussion
0104	Richard Bell MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 24) ESJ 0224 KEY 1117	Discussion
0105	Richard Bell MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 15) ESJ 0224 KEY 1117	Discussion
0106	Richard Bell MW 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 24) ESJ 0224 KEY 1117	Discussion
0107	Richard Bell MW 11:00am - 11:50am Th 9:30am - 10:20am	Seats (Total: 12) ESJ 0224 TLF 2103	Discussion
<i>This section is restricted to students in Carillon Communities.</i>			

HIST133

"God Wills It!" The Crusades in Medieval and Modern Perspectives

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH General Education: DSHS, SCIS

Cross-listed with: RELS289D. Credit only granted for: HIST133 or RELS289D.

An examination of the identities and convictions both of the Western Europeans who participated in the Crusades and of the Easterners (Muslim, Christian, and Jewish) whom they encountered in the Holy Land. Focuses on the era of the first four great Crusades, from about 1095 to 1215. Consideration of the cultural impact of these movements on both Western Europe and the Middle East.

Jointly offered with RELS289D.

0101	Janna Bianchini	Seats (Total: 24)	
	MW 11:00am - 11:50am	SYM 0200	
	W 12:00pm - 12:50pm	TLF 1101	Discussion
0102	Janna Bianchini	Seats (Total: 24)	
	MW 11:00am - 11:50am	SYM 0200	
	F 10:00am - 10:50am	TLF 1101	Discussion
0103	Janna Bianchini	Seats (Total: 24)	
	MW 11:00am - 11:50am	SYM 0200	
	F 11:00am - 11:50am	TLF 1101	Discussion

HIST135

Civil Discourse or Urban Riot: Why Cities Don't (Often) Explode

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH, D General Education: DSHS, DVUP, SCIS

Cross-listed with: JWST289E. Credit only granted for: HIST135 or JWST289E.

An examination of the mechanisms that promote peaceful co-existence in urban societies and a discussion of how and why city streets sometimes become violent.

Jointly offered with JWST289E. Credit granted for HIST135 or JWST289E.

0101	Bernard Cooperman	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	TWS 0310	
	W 11:00am - 11:50am	KEY 0100	Discussion
0102	Bernard Cooperman	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	TWS 0310	
	W 12:00pm - 12:50pm	KEY 0100	Discussion
0103	Bernard Cooperman	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	TWS 0310	
	Th 12:30pm - 1:20pm	SQH 1101	Discussion
0105	Bernard Cooperman	Seats (Total: 15)	
	TuTh 11:00am - 11:50am	TWS 0310	
	Th 5:00pm - 5:50pm	TWS 0205	Discussion
<i>Restricted to students in Carillon Communities.</i>			

HIST136

Moneyland: Business in American Culture

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH General Education: DSHS, SCIS

An exploration of American business culture and institutions from colonial times to the present with emphasis on how inherited and acquired identities (social capital) have shaped Americans' experiences as entrepreneurs, managers, workers, and consumers.

0101	David Sicilia	Seats (Total: 24)	
	MW 12:00pm - 12:50pm	ESJ 1224	
	M 10:00am - 10:50am	TLF 1103	Discussion
0102	David Sicilia	Seats (Total: 24)	
	MW 12:00pm - 12:50pm	ESJ 1224	
	M 11:00am - 11:50am	TLF 1103	Discussion
0103	David Sicilia	Seats (Total: 24)	
	MW 12:00pm - 12:50pm	ESJ 1224	
	W 10:00am - 10:50am	TLF 1103	Discussion
0104	David Sicilia	Seats (Total: 22)	
	MW 12:00pm - 12:50pm	ESJ 1224	
	W 2:00pm - 2:50pm	SYM 0209	Discussion
<i>This section is restricted to students in Carillon Communities.</i>			
0105	David Sicilia	Seats (Total: 8)	
	MW 12:00pm - 12:50pm	ESJ 1224	
	M 2:00pm - 2:50pm	JMZ 1122	Discussion
<i>This section is restricted to students in Carillon Communities.</i>			

HIST189D Topics in History; Martin Luther King, Jr.

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Thematic exploration of a topic in history at an introductory level with emphasis on understanding what historians do and how history is relevant in the contemporary world.

Jointly offered with AASP298M and AMST298D. Credit granted for HIST189D, AASP298M, or AMST298D.

0101	Quincy Mills	Seats (Total: 15)	
	TuTh 12:30pm - 1:45pm	TLF 2100	

HIST200**Interpreting American History: Beginnings to 1877**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH General Education: DSHS, DSHU

Credit only granted for: HIST156 or HIST200. Formerly: HIST156.

The United States from colonial times to the end of the Civil War. Establishment and development of American institutions.

0101	Richard Bell	Seats (Total: 24)	
	MW 9:00am - 9:50am	KEY 0106	
	Th 9:30am - 10:20am	ASY 3219	Discussion
0102	Richard Bell	Seats (Total: 24)	
	MW 9:00am - 9:50am	KEY 0106	
	Th 11:00am - 11:50am	EDU 1121	Discussion
0103	Richard Bell	Seats (Total: 24)	
	MW 9:00am - 9:50am	KEY 0106	
	Th 12:30pm - 1:20pm	KEY 0116	Discussion
0104	Richard Bell	Seats (Total: 24)	
	MW 9:00am - 9:50am	KEY 0106	
	F 9:00am - 9:50am	KEY 0100	Discussion
0105	Richard Bell	Seats (Total: 24)	
	MW 9:00am - 9:50am	KEY 0106	
	F 10:00am - 10:50am	KEY 0100	Discussion
0106	Richard Bell	Seats (Total: 24)	
	MW 9:00am - 9:50am	KEY 0106	
	F 12:00pm - 12:50pm	KEY 0100	Discussion
FC01	Richard Bell	Seats (Total: 25)	
	MW 3:00pm - 4:15pm	HBK 0123	
	<i>Restricted to students in Freshmen Connection.</i>		

HIST201**Interpreting American History: From 1865 to the Present**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH General Education: DSHS, DSHU, DVUP

Credit only granted for: HIST157 or HIST201. Formerly: HIST157.

The United States from the end of the Civil War to the present. Economic, social, intellectual, and political developments. Rise of industry and emergence of the United States as a world power.

0101	Howard Smead MW 12:00pm - 12:50pm M 9:00am - 9:50am	Seats (Total: 24) KEY 0106 KEY 0100	Discussion
0102	Howard Smead MW 12:00pm - 12:50pm M 10:00am - 10:50am	Seats (Total: 24) KEY 0106 KEY 0100	Discussion
0103	Howard Smead MW 12:00pm - 12:50pm M 1:00pm - 1:50pm	Seats (Total: 24) KEY 0106 ASY 3219	Discussion
0104	Howard Smead MW 12:00pm - 12:50pm W 9:00am - 9:50am	Seats (Total: 24) KEY 0106 KEY 0100	Discussion
0105	Howard Smead MW 12:00pm - 12:50pm W 10:00am - 10:50am	Seats (Total: 24) KEY 0106 KEY 0100	Discussion
0106	Howard Smead MW 12:00pm - 12:50pm W 1:00pm - 1:50pm	Seats (Total: 24) KEY 0106 KEY 0100	Discussion
0107	Howard Smead MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 24) KEY 0106 KEY 0100	Discussion
0108	Howard Smead MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 24) KEY 0106 JMZ 1224	Discussion
0109	Howard Smead MW 12:00pm - 12:50pm F 2:00pm - 2:50pm	Seats (Total: 24) KEY 0106 KEY 0100	Discussion
0201	Robert Chiles TuTh 12:30pm - 1:20pm F 9:00am - 9:50am	Seats (Total: 24) KEY 0106 KEY 0116	Discussion

0202	Robert Chiles	Seats (Total: 24)	
	TuTh 12:30pm - 1:20pm	KEY 0106	
	F 10:00am - 10:50am	KEY 0116	Discussion
0203	Robert Chiles	Seats (Total: 24)	
	TuTh 12:30pm - 1:20pm	KEY 0106	
	F 11:00am - 11:50am	KEY 0103	Discussion
0204	Robert Chiles	Seats (Total: 24)	
	TuTh 12:30pm - 1:20pm	KEY 0106	
	F 12:00pm - 12:50pm	KEY 0103	Discussion
0205	Robert Chiles	Seats (Total: 24)	
	TuTh 12:30pm - 1:20pm	KEY 0106	
	F 1:00pm - 1:50pm	KEY 0103	Discussion
0206	Robert Chiles	Seats (Total: 24)	
	TuTh 12:30pm - 1:20pm	KEY 0106	
	F 2:00pm - 2:50pm	KEY 0103	Discussion
FC01	Jeffrey Coster	Seats (Total: 25)	
	MW 6:00pm - 7:15pm	KEY 0100	
	<i>Restricted to students in Freshmen Connection.</i>		

HIST204

Introduction to the History of Science

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH General Education: DSHS

Credit only granted for: HIST174 or HIST204. Formerly: HIST174.

An exploration of the roots of modern science from the ancient Greeks through the medieval and early modern periods. Focus on the men and women who helped to create the sciences and to change public perceptions of their disciplines.

FC01	John Matthews	Seats (Total: 30)	
	MW 7:30pm - 8:45pm	WDS 1114	
	<i>Restricted to students in Freshmen Connection.</i>		

HIST208X

Historical Research and Methods Seminar; The Nation and Nationalism in History: Construction, Destruction, and Imagination

Credits: 3 Grading Method: Regular

Reading and research skills and methods. Research papers will be based on the topic of the seminar.

0101	Thomas Messersmith	Seats (Total: 12)
	Tu 11:00am - 12:50pm	KEY 0107
	Contact instructor or department for details.	
0201	Thomas Messersmith	Seats (Total: 12)
	Tu 2:00pm - 3:50pm	KEY 0107
	Contact instructor or department for details.	

HIST208Y

Historical Research and Methods Seminar; You Say You Want a Revolution: Upheavals in History

Credits: 3 Grading Method: Regular

Reading and research skills and methods. Research papers will be based on the topic of the seminar.

0101	Lauren Michalak	Seats (Total: 12)
	W 10:00am - 11:50am	TLF 2100
	Contact instructor or department for details.	
0201	Lauren Michalak	Seats (Total: 12)
	W 1:00pm - 2:50pm	TLF 2100
	Contact instructor or department for details.	

HIST208Z

Historical Research and Methods Seminar; Can a Movie be 'Accurate'? American Films as Historical Sources

Credits: 3 Grading Method: Regular

Reading and research skills and methods. Research papers will be based on the topic of the seminar.

0101	Kerry Tanner	Seats (Total: 12)
	Th 11:00am - 12:50pm	KEY 0107
	Contact instructor or department for details.	
0201	Kerry Tanner	Seats (Total: 12)
	Th 2:00pm - 3:50pm	KEY 0107
	Contact instructor or department for details.	

HIST213

History of Sexuality in America

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH, D General Education: DSHS

Cross-listed with: WMST298L. Credit only granted for: HIST213 or WMST298L.

Explores the social construction of sexualities from the first colonial settlement to the modern era in the United States. Analyzes the implications of these understandings for power relations in U.S history.

Cross-listed with WMST298L. Credit only granted for: HIST213, HIST219O, or WMST298L. Formerly: HIST219O.

0101	Clare Lyons	Seats (Total: 24)	
	MW 1:00pm - 1:50pm	SQH 1120	
	F 11:00am - 11:50am	TLF 1103	Discussion
0102	Clare Lyons	Seats (Total: 24)	
	MW 1:00pm - 1:50pm	SQH 1120	
	F 1:00pm - 1:50pm	TLF 1103	Discussion
0103	Clare Lyons	Seats (Total: 24)	
	MW 1:00pm - 1:50pm	SQH 1120	
	F 2:00pm - 2:50pm	TLF 1103	Discussion

HIST219J Special Topics in History; Modern India: From the British Raj to the World's Largest Democracy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DVUP

Surveys the making of modern India, as well as Pakistan and Bangladesh, from the onset of colonialism in the 18th century to the present day. Focuses on three key themes: state formation and the persistence of regional identities; the negotiation of religious, ethnic, caste, and gender differences; and economic development and inequality.

0101	Mircea Raianu	Seats (Total: 30)	
	MW 2:00pm - 3:15pm	KEY 0100	

HIST219O Special Topics in History; From Tarzan to Star Trek: Colonialism, Technology, and Science Fiction

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Explore science fiction and fantasy, especially late 19th to mid-twentieth century imaginings, in relation to political, social, and technological histories. Through literature and film, focuses especially on the genres of lost worlds, aliens, and other "galaxies".

0101	Paul Landau	Seats (Total: 40)	
	TuTh 2:00pm - 3:15pm	KEY 0103	

HIST219V**Special Topics in History; Islam in/and America**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with AAST298A and AMST298I. Credit granted for AAST298A, HIST219V, or AMST298A.

0101	Jisun Min	Seats (Total: 10)
	TuTh 2:50pm - 4:10pm	SQH 2122

HIST219Z**Special Topics in History; The Devil in the Western Imagination**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with RELS219Z. Credit granted for HIST219Z or RELS219Z.

0101	Andrew Kellett	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

HIST221**Asian American History**

Credits: 3 Grading Method: Regular, CORE: SH, D General Education: DSHS,
Pass-Fail, Audit DVUP

Cross-listed with AAST201. Credit only granted for: AAST201 or HIST221.

Introduction to the history of Asian Americans in the United States and the Americas and to the field of Asian American Studies, from an interdisciplinary perspective. Topics include theories of race and ethnicity; Asian migration and diaspora to the Americas; Asian American work and labor issues; gender, family, and communities; nationalism and nativism, and anti-Asian movements; Asian Americans in World War II, the Cold War, and the issues in the civil rights & post-civil rights era.

0101	Terry Park	Seats (Total: 60)
	TuTh 12:30pm - 1:45pm	TYD 2106

HIST224**Modern Military History, 1494-1815**

Credits: 3 Grading Method: Regular, CORE: SH General Education: DSHS
Pass-Fail, Audit

Survey of global military history from the European "discovery" of the Americas to the end of the Napoleonic Wars. Explores how the creation of professional armies, advancement of weapons technology, and evolution of military-civilian relations in Europe during these three centuries sparked the "Rise of the West".

0101	Patrick Chung	Seats (Total: 40)
	TuTh 9:30am - 10:45am	ESJ 1309

HIST232 The Historical Development of London

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH General Education: DSHS

Restriction: Permission of Study Abroad Office required. Credit only granted for: GNED288 and HIST232. Formerly: GNED288.

Study Abroad in London, England. The history of London, beginning with its foundation by the Romans, continuing with the city's progressive political and cultural domination of England, the British Isles and the British Empire, and concluding with a look at the city in the 20th century. Students look at London through the eyes of contemporaries and historians while forming their own impressions of the city during course-based walking tours of the city.

Contact department for information to register for this course.

HIST234 Invaders, Conquerors, Usurpers: A History of Pre-Modern Britain to 1485

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH General Education: DSHS

British history from Roman times to the 15th century. The Anglo-Saxon, Scandinavian, and Norman invasions; the coming of Christianity; Magna Carta, the development of Parliament, legal institutions, and the Common Law; the decline of medieval kingship.

0101	Sabrina Baron	Seats (Total: 40)
	TuTh 9:30am - 10:45am	KEY 0103

HIST250 Colonial Latin America

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH, D General Education: DSHS, DVUP

Cross-listed with LASC250. Credit only granted for: HIST250 or LASC250.

Introductory survey of the history of Latin America from pre-Columbian Indian cultures to the beginning of the wars for independence (ca. 1810), covering cultural, political, social, and economic developments. Major themes include conquest, colonialism, indigenous culture, African slavery, religion, race and ethnicity, and gender ideologies.

0101	David Sartorius	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	BPS 1236

HIST254**African-American History to 1865**

Credits: 3 Grading Method: Regular,
Pass-Fail

General Education: DVUP

Cross-listed with: AASP298C. Credit only granted for: HIST254 or AASP298C.

Survey of the principal developments in the history and culture of the peoples of African descent in colonial North America and the United States to 1865. Examines the African past, the Atlantic slave trade, variation in slavery, the growth of free black communities, the transformations of families and cultural forms, and patterns of resistance.

Cross-listed with AASP298C. Credit will be granted for AASP298C or HIST 254.

0101	Christopher Bonner	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	KEY 0116

HIST266**The United States in World Affairs**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

CORE: SH

General Education: DSHS

A study of the United States as an emerging world power and the American response to changing status in world affairs. Emphasis on the relationship between internal and external development of the nation.

0101	Howard Smead	Seats (Total: 40)
	MW 2:00pm - 3:15pm	KEY 0116

HIST269**Special Topics in Study Abroad II**

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

HIST269M**Special Topics in Study Abroad II; History of Modern Italy**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

HIST269Y**Special Topics in Study Abroad II; Rome: Republic and Empire**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

HIST284

East Asian Civilization I

Credits: 3 Grading Method: Regular, CORE: SH, D General Education: DSHS,
Pass-Fail, Audit DVUP

An interdisciplinary survey of the development of East Asian cultures. An historical approach drawing on all facets of East Asian traditional life, to gain an appreciation of the different and complex cultures of the area.

0101	Ting Zhang	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	SYM 0200	
	W 10:00am - 10:50am	KEY 1117	Discussion
0102	Ting Zhang	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	SYM 0200	
	W 12:00pm - 12:50pm	KEY 1117	Discussion
0103	Ting Zhang	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	SYM 0200	
	W 1:00pm - 1:50pm	KEY 1117	Discussion

HIST287

Why the Jews? Historical and Cultural Investigations

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit DSHU, DVUP

Restriction: Must not have completed HIST282, HIST283, JWST234, or JWST235. Cross-listed with JWST233. Credit only granted for: HIST287 or JWST233.

Examines the history and culture of the Jews from the thirteenth century BCE/BC to the present through an examination of significant themes or problems (such as "religion" or "diaspora") that shape our understanding of the Jewish people. A primary focus in the course will be on texts, artifacts, and other cultural products by Jews and others that illustrate the history of the Jews help understand their cultural heritage.

For Fall 2019 - Cross-listed with JWST233 and RELS219D. Credit only granted for HIST287, JWST233, or RELS219D.

0101	Bernard Cooperman	Seats (Total: 24)	
	TuTh 2:00pm - 2:50pm	SQH 1120	
	W 11:00am - 11:50am	TLF 1103	Discussion
0102	Bernard Cooperman	Seats (Total: 24)	
	TuTh 2:00pm - 2:50pm	SQH 1120	
	W 12:00pm - 12:50pm	TLF 1103	Discussion
0103	Bernard Cooperman	Seats (Total: 20)	
	TuTh 2:00pm - 2:50pm	SQH 1120	
	W 2:00pm - 2:50pm	WDS 1131	Discussion

HIST289O

Lawlessness: From Pirates to Body-snatchers, Exploring the Legitimacy of Illicit Activity

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, SCIS

Explores motives of and responses to the lawless behavior of pirates, body snatchers, bandits, vigilantes, smugglers and others worldwide from the 1500s to today.

0101	Anne Rush	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	TYD 2109	
	F 11:00am - 11:50am	KEY 0126	Discussion
0102	Anne Rush	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	TYD 2109	
	F 1:00pm - 1:50pm	KEY 0126	Discussion
0103	Anne Rush	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	TYD 2109	
	F 2:00pm - 2:50pm	KEY 0126	Discussion
FC01	Anne Rush	Seats (Total: 24)	
	TuTh 3:00pm - 4:15pm	TLF 1103	
	<i>Restricted to students in Freshmen Connection.</i>		

HIST289T

Jesus, Mani, and Muhammad: The Dynamics of New Religious Movements

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO, D General Education: DSHU, DVUP, SCIS

Cross-listed with: RELS289M. Credit only granted for: RELS289M or HIST289T.

Cross-listed with RELS289M. Credit Granted for RELS289M or HIST289T.

0101	Elizabeth Conner	Seats (Total: 24)		
	MW 1:00pm - 1:50pm	TYD 2106		
	W 2:00pm - 2:50pm	SQH 1103		Discussion
0102	Elizabeth Conner	Seats (Total: 24)		
	MW 1:00pm - 1:50pm	TYD 2106		
	F 11:00am - 11:50am	SQH 1101		Discussion
0103	Elizabeth Conner	Seats (Total: 24)		
	MW 1:00pm - 1:50pm	TYD 2106		
	F 1:00pm - 1:50pm	SQH 1101		Discussion

HIST289Y

Zombies, Fear, and Contagion: A Cultural History of Public Health, Medicine, and Technology

Credits: 3		Grading Method: Regular, Pass-Fail, Audit		General Education: DSHS, DSHU, DVUP, SCIS
0101	Chantel Rodriguez	Seats (Total: 24)		
	MW 2:00pm - 2:50pm	ESJ 2208		
	M 10:00am - 10:50am	TLF 1101		Discussion
0102	Chantel Rodriguez	Seats (Total: 24)		
	MW 2:00pm - 2:50pm	ESJ 2208		
	M 11:00am - 11:50am	TLF 1101		Discussion
0103	Chantel Rodriguez	Seats (Total: 24)		
	MW 2:00pm - 2:50pm	ESJ 2208		
	M 1:00pm - 1:50pm	TLF 1101		Discussion
0104	Chantel Rodriguez	Seats (Total: 24)		
	MW 2:00pm - 2:50pm	ESJ 2208		
	W 9:00am - 9:50am	TLF 1101		Discussion
0105	Chantel Rodriguez	Seats (Total: 24)		
	MW 2:00pm - 2:50pm	ESJ 2208		
	W 10:00am - 10:50am	TLF 1101		Discussion
0106	Chantel Rodriguez	Seats (Total: 24)		
	MW 2:00pm - 2:50pm	ESJ 2208		
	W 1:00pm - 1:50pm	TLF 1101		Discussion

HIST299**Directed Research**

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit*Closely guided research in primary sources for students currently enrolled in selected 100- or 200-level surveys in the Department of History.*

Prerequisite: permission of department.

Contact department for information to register for this course.

HIST319B**Special Topics in History; History of the Vietnam War**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

0101	Colleen Woods	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	KEY 0126

HIST319D**Special Topics in History; Global Women in World War II**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with WMST379W. Credit granted for HIST319D or WMST379W.

0101	Dewen Zhang	Seats (Total: 30)
	TuTh 9:30am - 10:45am	TLF 1103

HIST319E**Special Topics in History; European Entanglements in the Thirty Years War**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

0101	Sabrina Baron	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	KEY 1117

HIST319J**Special Topics in History; Confederate Monuments in Historical Perspective**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

0101	Leslie Rowland	Seats (Total: 20)
	MW 2:00pm - 3:15pm	TLF 2103

HIST319N**Special Topics in History; The Black Power Movement**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with AASP398E. Credit only granted for HIST319N or AASP398E . This course examines the ideologies, politics, economy, and culture of Black Power as a social movement for liberation.

0101	Quincy Mills	Seats (Total: 40)
	TuTh 9:30am - 10:45am	TYD 1132

HIST319R**Special Topics in History; Genghis Khan and the Mongols: Destroyers of Worlds and Patrons of Culture**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

0101	Colleen Ho	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	KEY 0103

HIST319V**Special Topics in History; America in the 1960's**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

0101	Katarina Keane	Seats (Total: 40)
	MW 3:30pm - 4:45pm	KEY 0103

HIST319W**Special Topics in History; One Hundred Years of Hollywood and Politics**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with FILM329G. Credit granted for HIST319W or FILM329G.

0101	Saverio Giovacchini	Seats (Total: 40)
	MW 11:00am - 11:50am	KEY 0103
	Class time/details on ELMs	ONLINE

HIST328D**Inventing Ancient Greek Culture**

Credits: 3 Grading Method: Regular, General Education: DSHU,
Pass-Fail, Audit DVUP

Cross-listed with: CLAS311. Credit only granted for: CLAS311 or HIST328D.

Who were the ancient Greeks, and were they the founders of Western civilization? The course examines the foundations of ancient Greece. Through an analysis of the historical, archaeological, and linguistic evidence, it sheds light on the so-called Black Athena Controversy, which raised doubts about the ancient Greek contribution to Western culture. The course also focuses on the impact of modern identity politics on scholarly discussions of antiquity and the ways in which the Culture Wars of the 1980s and 1990s have influenced analyses of the ancient Greek world.

Cross-listed with CLAS311. Credit granted for HIST328D or CLAS311.

0101	Eric Adler	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	SQH 1107

HIST328M Selected Topics in History; Red, White, and Black: Peoples and Communities in Early America

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

This course examines ideas about difference as they developed from the fifteenth through the eighteenth centuries in North America and the Atlantic World. We will consider the creation of racial categories and the ways that individuals experienced and contested categorization.

0101	Christopher Bonner	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	TLF 1101

HIST328O Selected Topics in History; Inventing the New World

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

From Columbus to the Amazons, El Dorado and the cannibals. Explores how sixteenth-century Europeans tried to make sense of their discovery of the Americas. Emphasis on the ways in which the textual and visual representations of native peoples and their cultures by explorers, conquistadors, and missionaries contributed to development of European colonialism.

0101	Alejandro Canequé	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	TLF 1101

HIST328R Selected Topics in History; Global History of Soccer: Politics, Culture, and Society

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The course focuses on the transnational history of soccer as shaping political culture and national identities around the world from the late 19th century to the present. The course covers historical significance of the game in Europe, Latin America, the United States, Africa, and Asia.

0101	Daniel Richter	Seats (Total: 40)
	MW 2:00pm - 3:15pm	SQH 1101

HIST328W Women in Classical Antiquity

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHU, DVUP

Cross-listed with: CLAS320, WMST320. Credit only granted for: CLAS320, WMST320, or HIST328W.

A study of women's image and reality in ancient Greek and Roman societies through an examination of literary, linguistic, historical, legal, and artistic evidence; special emphasis in women's role in the family, views of female sexuality, and the place of women in creative art. Readings in primary sources in translation and modern critical writings.

Cross-listed with CLAS320 and WMST320. Credit granted for HIST328W, CLAS320, or WMST320.

0101	Lillian Doherty	Seats (Total: 35)
	TuTh 9:30am - 10:45am	KEY 0126

HIST328Y Selected Topics in History; Women in Chinese History

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Cross-listed with WMST379Y. Credit granted for HIST328Y or WMST379Y.

0101	Dewen Zhang	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	KEY 0100

HIST329B Special Topics in History; Drugs in the Modern World: From Opium Wars to the War on Drugs

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

This course explores the history of drugs in a global context by focusing on the origins and demand for drugs including opium, alcohol, caffeine, cocaine, marijuana, heroin, OxyContin, and Viagra.

0101	Daniel Richter	Seats (Total: 40)
	MW 12:00pm - 12:50pm	SQH 1101
	Class time/details on ELMs	ONLINE

HIST331 Europe in the High Middle Ages: 1000-1500

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with RELS341. Credit only granted for: HIST331 or RELS341.

Medieval civilization in the 11th through 15th centuries. Emphasis on cultural and political developments of the high Middle Ages with study of the principal sources of medieval thought and learning, art and architecture, and political theory prior to the Renaissance.

0101	Janna Bianchini	Seats (Total: 40)
	MW 2:00pm - 3:15pm	KEY 0126

HIST332 Renaissance Europe

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: HIST112 or HIST111; or permission of instructor. Also offered as: RELS342. Credit only granted for: HIST332 or RELS342.

Intellectual developments in Italy and Northern Europe from 1300 to 1550 and their influence on the arts and religion; social and economic trends, including the rise of the commercial economy in cities; the family and the role of women in society; expansion of Europe overseas and the beginnings of colonization; emergence of the state and consequent changes in political theory.

0101	Stefano Villani	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	KEY 0116

HIST353 America in the Revolutionary Era, 1763-1815

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The background and course of the American Revolution and early nationhood through the War of 1812. Emphasis on how the Revolution shaped American political and social development, the creation of a new government under the Constitution, and the challenges facing the new nation.

0101	Holly Brewer	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	ESJ 1309

HIST355 Civil War and the Rise of Industrialization, 1860-1900

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: HIST200, HIST201, HIST210, HIST213, HIST222, HIST254, HIST255, or HIST275; or must have completed HIST156 or HIST157; or permission of instructor. Credit only granted for: HIST355 or HIST364.

Civil War, sectional and class conflicts and their impact on American life and institutions from the beginning of the Civil War through the Gilded Age; social, economic, and political reconstruction of the Union; industrialization, urbanization, and technological changes.

0101	Robert Chiles	Seats (Total: 40)
	TuTh 9:30am - 10:45am	KEY 0116

HIST357**Recent America: 1945-Present**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: HIST201, HIST211, HIST213, HIST222, HIST255, or HIST275; or must have completed HIST157; or permission of instructor.

American history from the inauguration of Harry S. Truman to the present with emphasis upon politics and foreign relations, but with consideration of special topics such as radicalism, conservatism, and labor.

0101	Robert Chiles	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	KEY 0126

HIST369F**Special Topics in Study Abroad III; Caesar, Cicero and the Collapse of the Roman Republic**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

HIST370**Jews and Judaism in Antiquity I: Sixth Century BCE through the First Century CE**

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit DSSP, DVUP

Cross-listed with JWST325. Credit only granted for: HIST370 or JWST325.

Political, social, and religious history of the Jews from the Persian period to the Judean revolt of 66-70 CE. Special attention to the rise of sectarian and revolutionary movements.

0101	Hayim Lapin	Seats (Total: 40)
	MW 10:00am - 10:50am	KEY 0126
	Class time/details on ELMs	ONLINE

HIST376 History of Modern Israel

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS

Cross-listed with ISRL342. Credit only granted for: HIST376 or ISRL342.

History of modern Israel since the beginning of the Zionist settlement in 1882. Attention to different interpretations and narratives of Israel's history, including the historical and ideological roots of Zionism, the establishment of the State of Israel, ideological forces, wars, and the triumphs and crises of democracy.

Cross-listed with ISRL342. Credit granted for HIST376 or ISRL342.

0101	Moran Stern	Seats (Total: 35)
	W 4:00pm - 6:30pm	TYD 2110

HIST382 Law and Culture in Late Imperial China

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An exploration of Chinese law and its social/cultural implications in the late imperial period (1550s-1900s). Major interpretations of the conceptions of law and justice, the functioning of the judicial system, and local courts. An introduction to society and culture, politics and the bureaucracy, family and gender relations, and literature and popular religion of China through the lens of law.

0101	Ting Zhang	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	KEY 0100

HIST386 Experiential Learning

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Restriction: Permission of ARHU-History department; and junior standing or higher.

The History Department's Internship program. Pre-professional experience in historical research, analysis, and writing in a variety of work settings.

Contact department for information to register for this course.

HIST395**Honors Colloquium I**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of ARHU-History department; and must be in History program.

History and theory: the conceptual underpinnings of the historical discipline. Students evaluate several contrasting theories of history. Prerequisite for other honors courses.

0101	Robyn Muncy	Seats (Total: 15)
	Tu 2:00pm - 3:50pm	TLF 2103
	Contact instructor or department for details.	

HIST398**Honors Thesis I**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Individual research and preparation of History Honors Theses.

Contact department for information to register for this course.

HIST399**Honors Thesis II**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Individualized research and preparation of History Honors Theses.

Contact department for information to register for this course.

HIST408B**Senior Seminar; What Does Government Do? The State in American History**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A capstone course for history majors, designed to increase historical knowledge and the ability to analyze texts and arguments. Topics will focus on the literature of a particular field and primary-source research.

Permission of Department Required.

0101	David Freund	Seats (Total: 12)
	W 1:00pm - 2:50pm	TLF 2108
	Contact instructor or department for details.	

HIST408D**Senior Seminar; Empire and Borderlands in Russia**

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A capstone course for history majors, designed to increase historical knowledge and the ability to analyze texts and arguments. Topics will focus on the literature of a particular field and primary-source research.

This class discusses processes of empire-building under the Romanov dynasty's rule from Peter the Great (r. 1682-1725) to the First World War from the angle of tsarist Russia's multi-ethnic and multi-confessional composition. We will look into the ways the imperial state dealt with the rise of nationalism in Russia's western, southern, and eastern borderlands.

0101	Mikhail Dolbilov	Seats (Total: 12)
	Th 12:30pm - 2:20pm	TLF 2108
	Contact instructor or department for details.	

HIST408I Senior Seminar; Literature and Jewish Life in Eastern Europe

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A capstone course for history majors, designed to increase historical knowledge and the ability to analyze texts and arguments. Topics will focus on the literature of a particular field and primary-source research.

We will read and discuss literary works by different authors describing Jewish life in Eastern Europe, and examine their contribution to the myths, images, and historiography of Eastern European Jewry. Scholarly articles will help us analyze the specific historical conditions that served as background for the different literary works.

0101	Rachel Manekin	Seats (Total: 5)
	TuTh 4:00pm - 5:15pm	SQH 1123

HIST408L Senior Seminar; Social, Political, and Cultural History of American Film

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A capstone course for history majors, designed to increase historical knowledge and the ability to analyze texts and arguments. Topics will focus on the literature of a particular field and primary-source research.

0101	Saverio Giovacchini	Seats (Total: 12)
	M 2:00pm - 3:50pm	TLF 2108
	Contact instructor or department for details.	

HIST408N Senior Seminar; Debating Slavery, Absolutism, and Democracy

(Perm req)

Credits: 3 Grading Method: Regular CORE: CS General Education: DSSP

A capstone course for history majors, designed to increase historical knowledge and the ability to analyze texts and arguments. Topics will focus on the literature of a particular field and primary-source research.

0101	Holly Brewer	Seats (Total: 12)
	Tu 2:00pm - 3:50pm	TLF 2101
	Contact instructor or department for details.	

HIST416 History of Slavery and the Slave Trade in Africa

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: HIST416 or HIST419Y. Formerly: HIST419Y.

Examines the history and impact of the slave trade on African states, societies, and economies. Investigates the meaning of slavery in Africa, the local uses of slavery there and Africa's connections to the Trans-Saharan, Red Sea, and Trans-Atlantic slave trades.

0101	Paul Landau	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	TLF 2103

HIST419I Special Topics in History; History of Palestine in Modern Times

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with ISRL448O. Credit granted for HIST419I or ISRL448O. This seminar explores the contested history of Palestine from the 18th century to 1948. We will explore some of the major historiographical debates pertaining to Ottoman Palestine until WWI, Zionist settlement and Arab resistance, the British mandate and the emergence of the State of Israel. Topics covered include the emergence and trajectories of Zionism and Palestinian nationalism, "Arab Jews," Palestine's economy, colonialism, religiosity and the politics of memory.

0101	Shay Hazkani	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	HJP 2114

HIST419M Special Topics in History; Nazi Germany

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Examines origins, nature, consequences and aftermath of the Nazi regime from World War I to the post World War II era. Particular attention on historian's interpretation of how and why Nazism came to power, consolidated its power, launched World War II and the Holocaust and was defeated, and on questions of evidence and the search for truth in the postwar era.

0101	Jeffrey Herf	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	HBK 0103

HIST419N Special Topics in History; The Unending War: From the Korean War to the Korean Wave

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

This is a seminar course on the Korean War and its legacies. It examines how the conflict, often dubbed the forgotten war, sparked enduring changes to the politics, culture, and economies of the United States and the two Koreas.

0101	Patrick Chung	Seats (Total: 15)
	Th 3:30pm - 6:00pm	TLF 2103

HIST419P Special Topics in History; Origins of Ethnic Cleansing in Russia/USSR

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

We will discuss nationality policies in the Russian Empire and in the Soviet Union, with a focus on large-scale violence practiced by the state against various ethnic/ethno-religious/ethno-social groups and minorities. The key theme concerns the ways in which major changes in governance, population control, and surveillance engendered persecutions, deportations, or even genocides.

0101	Mikhail Dolbilov	Seats (Total: 30)
	TuTh 9:30am - 10:45am	KEY 0100

HIST419Q Special Topics in History; Before the Holocaust: The Golden Age of European Jewry

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit DVUP

Jointly offered with JWST370. Credit granted for HIST419Q or JWST370.

0101	Rachel Manekin	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	SQH 1121

HIST419R Special Topics in History; Social History of Medicine: Health and the Body in Modern US History

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

0101	Chantel Rodriguez	Seats (Total: 15)
	W 3:30pm - 6:00pm	JMZ 2122

HIST419T Special Topics in History; Deindustrialization and Global Capitalism

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Examines the phenomenon of deindustrialization in the context of the global history of capitalism, from the Industrial Revolution in the early 19thc. to the United States in the early 21stc. Topics includes technology and automation, loss of manufacturing jobs, and the decline and revitalization of urban areas. Focus on social and cultural changes accompanying the process.

0101	Mircea Raianu	Seats (Total: 15)
	Tu 12:30pm - 3:00pm	TLF 2108

HIST428C Selected Topics in History; Contemporary Issues in Public Policy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with PLCY401. Credit granted for HIST428C or PLCY401.

0101	Claire Dunning	Seats (Total: 40)
	W 2:00pm - 4:30pm	VMH 1207

HIST429A Special Topics in History; Victoria's Secrets: Sex and Class in Nineteenth Century Britain

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Queen Victoria, Darwin, Sherlock Holmes and Jack the Ripper: meet some of the Victorians who continue to captivate our historical imagination and learn the truth about sex, class, and race in 19th Century Britain.

0101	Julie Taddeo	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	KEY 1117

HIST429L Special Topics in History; History of Iran in the Islamic Period (7th Century to the Present)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with PERS498L and RELS419X. Credit only granted for HIST429L, PERS498L, or RELS419X.

0101	Ahmet Karamustafa	Seats (Total: 10)
	Tu 3:30pm - 6:00pm	HJP 3120

HIST429N Special Topics in History; The Aztecs: Human Sacrifice and Conquest

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with PHIL428N, LASC448J, and RELS419J. Credit only granted for HIST429N, PHIL428N, LASC448J, or RELS419J.

0101	James Maffie	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	KEY 0116

HIST429P Special Topics in History; Modern Germany Between Dictatorship and Democracy

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Primary and secondary source readings in modern German history. The readings focus on political, international, diplomatic, and intellectual history with some attention to economic, cultural, social and military history.

0101	Jeffrey Herf	Seats (Total: 5)
	Tu 3:30pm - 6:00pm	TLF 2100

HIST454 Constitutional History of the United States: From Colonial Origins to 1865

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The interaction of government, law, and politics in the constitutional system. The nature and purpose of constitutions and constitutionalism; the relationship between the constitution and social forces and influences, the way in which constitutional principles, rules, ideas, and institutions affect events and are in turn affected by events. The origins of American politics and constitutionalism through the Constitutional Convention of 1787. Major constitutional problems such as the origins of judicial review, democratization of government, slavery in the territories, secession, and civil war.

0101	Michael Ross	Seats (Total: 40)
	TuTh 3:30pm - 4:45pm	SQH 1120

HIST467 Women and Reform Movements in the Twentieth-Century United States

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Recommended: HIST201, HIST211, or HIST255. Credit only granted for: HIST467 or HIST429E. Formerly: HIST429E.

Investigation of women's participation in such twentieth-century reform movements as the labor movement, the struggle for racial justice, social welfare reform, and women's movements. Will ask how race, class, and gender were implicated in the ways that women agitated for social political change.

0101	Robyn Muncy	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	KEY 0100

HIST473 History of the Caribbean

Credits: 3 Grading Method: Regular, Pass-Fail, Audit, D

Prerequisite: HIST112, HIST113, HIST122, HIST123, HIST240, HIST250, or HIST251.

Offers a concise introduction to the history of the Caribbean regions from the Columbian voyages to the 20th century. Special emphasis is given to the dynamics of local social and cultural formations within the framework of the political and economic history of the Atlantic world.

0101	David Sartorius	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	TLF 1103

HIST481 A History of Modern China

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Modern China from 1644 to the People's Republic of China. Emphasis on the coming of the West to China and the various stages of the Chinese reaction.

Contact department for information to register for this course.

HIST482 History of Japan to 1800

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Traditional Japanese civilization from the age of Shinto mythology and introduction of continental learning down to the rule of military families, the transition to a money economy, and the creation of a townsmen's culture. A survey of political, economic, religious, and cultural history.

0101	Louisa Rubinfien	Seats (Total: 30)
	MW 3:30pm - 4:45pm	KEY 0100

HIST491**History of the Ottoman Empire**

Credits: 3 Grading Method: Regular, , D
Pass-Fail, Audit

Survey of the Ottoman Turkish Empire from 1300 A.D. to its collapse during World War I. Emphasis on the empire's social and political institutions and its expansion into Europe, the Arab East and North Africa.

0101	Madeline Zilfi	Seats (Total: 30)
	TuTh 9:30am - 10:45am	KEY 1117

HIST499**Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: permission of department.

Contact department for information to register for this course.

HIST601**History and Contemporary Theory**

Credits: 3 Grading Method: Regular,
Audit

An introduction to contemporary theories in philosophy, literary criticism, cultural studies, anthropology, and other fields; and analysis of their usefulness to historians.

0101	Stefano Villani	Seats (Total: 15)
	Tu 6:00pm - 8:30pm	TLF 2108

HIST607**The Teaching of History in Institutions of Higher Learning**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

0101	Alejandro Canaque	Seats (Total: 15)
	Contact instructor or department for details.	
0201	Antoine Borrut	Seats (Total: 6)
	Contact instructor or department for details.	

HIST608A**General Seminar; American History**

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

General seminar in student's major field of study (e.g., U.S.; Women and Gender; International, World, and Comparative; Science and Technology; Latin America) exploring the concentration's major issues, topics, and literature.

Prerequisite: permission of department.

0101	Clare Lyons	Seats (Total: 15)
	W 3:30pm - 6:00pm	TLF 2108

HIST608N General Seminar; Global Interaction and Exchange

Credits: 3 Grading Method: Regular,
Audit

General seminar in student's major field of study (e.g., U.S.; Women and Gender; International, World, and Comparative; Science and Technology; Latin America) exploring the concentration's major issues, topics, and literature.

0101	Colleen Woods	Seats (Total: 12)
	Th 3:30pm - 6:00pm	TLF 2108

HIST610 Introduction to Museum Scholarship

Credits: 3 Grading Method: Regular,
Audit

Cross-listed with ANTH655, AMST655. Credit only granted for: AMST655, ANTH655, or HIST610.

Provides students a basic understanding of museums as cultural and intellectual institutions. Topics include the historical development of museums, museums as resources for scholarly study, and the museum exhibition as medium for presentation of scholarship.

0101	Diana Marsh	Seats (Total: 15)
	W 7:00pm - 9:45pm	WDS 1127

HIST619A Special Topics in History; Independent Study

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

Prerequisite: permission of department.

Contact department for information to register for this course.

HIST619B Special Topics in History; Independent Study

(Perm req)

Credits: 1-3

Grading Method: Regular,
Audit

Prerequisite: permission of department.

Contact department for information to register for this course.

HIST619C

Special Topics in History; Civil Rights Movement

Credits: 3

Grading Method: Regular,
Audit

0101	Elsa Barkley Brown	Seats (Total: 12)
	Th 6:00pm - 8:30pm	TLF 2108

HIST619I

Special Topics in History; History of Palestine in Modern Times

Credits: 3

Grading Method: Regular,
Audit

This seminar explores the contested history of Palestine from the 18th century to 1948. We will explore some of the major historiographical debates pertaining to Ottoman Palestine until WWI, Zionist settlement and Arab resistance, the British mandate and the emergence of the State of Israel. Topics covered include the emergence and trajectories of Zionism and Palestinian nationalism, "Arab Jews," Palestine's economy, colonialism, religiosity and the politics of memory.

0101	Shay Hazkani	Seats (Total: 5)
	TuTh 2:00pm - 3:15pm	HJP 2114

HIST619P

Special Topics in History; History of Iran in the Islamic Period (7th Century to the Present)

Credits: 3

Grading Method: Regular,
Audit

An overview of Iranian history from the Arab Muslim conquests of the seventh century to the 1979 revolution, with particular attention to social and cultural history.

0101	Ahmet Karamustafa	Seats (Total: 5)
	Tu 3:30pm - 6:00pm	HJP 3120

HIST619Q

Special Topics in History; The Unending War: From the Korean War to the Korean Wave

Credits: 3

Grading Method: Regular,
Audit

0101	Patrick Chung	Seats (Total: 5)
	Th 3:30pm - 6:00pm	TLF 2103

HIST619R

Credits: 3

0101	Leslie Rowland	Seats (Total: 12)
	Tu 3:30pm - 6:00pm	TLF 2108

HIST619Y

Credits: 3

0101	Madeline Zilfi	Seats (Total: 5)
	TuTh 9:30am - 10:45am	KEY 1117

HIST708

Credits: 1-4

Directed reading in preparation for Doctoral Comprehensive Examinations. In consultation with their advisors, students will select a number of books and articles from an approved list. Grading for the course will reflect performance on the written and oral sections of the Comprehensive Examinations.

Contact department for information to register for this course.

HIST709

Credits: 1-4

Directed reading in preparation for Doctoral Comprehensive Examinations. In consultation with their advisors, students will select a number of books and articles from an approved list. Grading for the course will reflect performance on the written and oral sections of the Comprehensive Examinations.

Contact department for information to register for this course.

HIST729D

Credits: 3

Reading knowledge of some European language recommended but not required.

Primary and secondary source readings in modern German history. The readings focus on political, international, diplomatic, and intellectual history with some attention to economic, cultural, social and military history.

0101	Jeffrey Herf	Seats (Total: 10)
	Tu 3:30pm - 6:00pm	TLF 2100

HIST799 Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

HIST811 Museum Scholarship Practicum

(Perm req)

Credits: 3-6 Grading Method: Regular

Prerequisite: AMST856, ANTH856, or HIST810. Restriction: Permission of Museum Scholarship Program required. Cross-listed with ANTH857, AMST857. Credit only granted for: AMST857, ANTH857, or HIST811.

Students devise and carry out a research program using the collections at the Smithsonian Institution or some other cooperating museum, working under joint supervision of a museum professional and a university faculty member.

0101	Mary Alexander	Seats (Total: 3)
	Contact instructor or department for details.	
0401	Mary Sies	Seats (Total: 2)
	Contact instructor or department for details.	
0901	Ricardo Punzalan	Seats (Total: 2)
	Contact instructor or department for details.	

HIST819A Special Topics in History: Independent Research

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Individual graduate research in an area not covered by current seminar offerings. The product will be a finished research paper normally based on original materials.

Department permission required.

Contact department for information to register for this course.

HIST819B Special Topics in History: Independent Research

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

0101	Gul Branco	Seats (Total: 75)
	F 1:00pm - 3:30pm	ESJ 2212

HLMN472 Strategies for Innovation & Entrepreneurship

Credits: 3 Grading Method: Regular

Restriction: Restricted to students in the Hillman Entrepreneurs Program. Credit only granted for: HLMN472, BMGT467, or ENES463. Additional information: HLMN472 may not count toward any BMGT major or minor degree.

Understand the process of technological change; the ways that firms come up with innovations; the strategies that firms use to benefit from innovation; and how to create new value not only through new products or services, but with novel technologies, business concepts, organizing structures, transaction/financing mechanisms, distribution channels, and market segmentation. Challenge students to think about how to create value and build a productive business organization with available resources (e.g. intelligence, insight, energy, initiative and personal relationships).

0101	Adam Zuckerman, Harry Alford	Seats (Total: 75)
	F 1:00pm - 3:30pm	TWS 1310

HLSA Health Services Administration Fall 2019

HLSA300 Introduction to Health Policy and Services

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in SPHL100 or PHSC300. Restriction: Must be in Public Health Science program; and must have earned a minimum of 60 credits. Credit only granted for: SPHL498P or HLSA300. Formerly: SPHL498P.

A multidimensional view of public health policy and services. Through interactive discussion of assigned readings, team-based learning, and supplementary lecture, students will learn about the nature of and development of policy, public health policy, and financing and delivery of health care services. This course will place a significant emphasis on a team-based learning approach to understanding the health care system and health care reform.

0101	Neil Sehgal	Seats (Total: 20)
	MW 10:00am - 10:50am	ESJ 2208
	W 11:00am - 11:50am	SPH 0116B Discussion
0102	Neil Sehgal	Seats (Total: 20)
	MW 10:00am - 10:50am	ESJ 2208
	W 12:00pm - 12:50pm	SPH 0116B Discussion

0103	Neil Sehgal MW 10:00am - 10:50am W 2:00pm - 2:50pm	Seats (Total: 20) ESJ 2208 SPH 0116B	Discussion
0104	Neil Sehgal MW 10:00am - 10:50am W 3:00pm - 3:50pm	Seats (Total: 20) ESJ 2208 SPH 0116B	Discussion
0105	Neil Sehgal MW 10:00am - 10:50am F 9:00am - 9:50am	Seats (Total: 20) ESJ 2208 SPH 0116B	Discussion
0106	Neil Sehgal MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 20) ESJ 2208 SPH 0116B	Discussion
0107	Neil Sehgal MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 20) ESJ 2208 SPH 0116B	Discussion
0108	Neil Sehgal MW 10:00am - 10:50am F 12:00pm - 12:50pm	Seats (Total: 20) ESJ 2208 SPH 0116B	Discussion
ESG1	Negin Fouladi M 2:00pm - 4:30pm <i>Restricted to Shady Grove students in the Public Health Sciences major. Permission of program director is required for other UMCP undergraduate students to enroll.</i>	Seats (Total: 35) BLD3 2225	

HLSA484

Redesigning Health Care: Developing a Clinic to Meet Community Needs

Credits: 3

Grading Method: Regular

Restriction: Must have completed a minimum of 60 credits. Additional information: Two sessions will be on-site at the Mona Clinic in Temple Hills, MD, and the remaining sessions will be taught in the University of Maryland's Academy for Innovation and Entrepreneurship.

Provides an opportunity for students to learn a key entrepreneurial skill, Design Thinking, while helping to build, reshape, redesign and transform delivery of health care in the Mona Center, a new community center and clinic in Prince George's County. This new, modern vision for a health and wellness clinic embraces student involvement in designing, planning and contributing to innovative programs, solutions, and processes to improve the clinic's ability to meet community and patient needs by addressing the social determinants of health as well as traditional clinical health status. Students in the class will develop empathy for patients, providers and other stakeholders, define problems, select a specific problem for intervention, understand problems based on stakeholder input, ideate, reframe and suggest options to solve or address the problem, prototype solutions, test ideas, and make recommendations to inform implementation and ongoing measurement and monitoring of impact.

0101	Stephen Thomas	Seats (Total: 24)
	F 10:00am - 12:30pm	ESJ 2101

HLSA601 Introduction to Health Systems

Credits: 3 Grading Method: Regular,
Audit

Management and leadership skills for effective public health planning, organization, management and administration. Emphasis is on the role of institutions in learning and behavioral change process, organizational theory, administration management, and coordinating provision of community health services.

0102	Andrew Anderson	Seats (Total: 60)
	Tu 4:00pm - 6:45pm	SPH 1301
PLH1	Negin Fouladi	Seats (Total: 35)
	Class time/details on ELMs	ONLINE
	<i>Must be in Public Health Policy & Practice program. For permission to enroll, contact oes@umd.edu.</i>	

HLSA611 Introduction to Health Equity

Credits: 3 Grading Method: Regular

The emerging field of health equity is concerned with understanding the causes and consequences of social disparities in population health. This course is designed to expose students to the foundational issues in health equity from a variety of perspectives. Through weekly meetings and discussion, students will develop familiarity with the major literature in the field of health equity. The course is divided into three sections: (1) Understanding & Addressing Health Disparities; (2) Disparity Populations; and (3) Solutions in Health Equity. Students will gain understanding of the dimensions and sources of health inequality, including race/ethnicity, socioeconomic status, gender, nativity, and sexual minority status. Current policy debates and recent policy developments related to health equity are also briefly discussed.

0101	Kellee White	Seats (Total: 25)
	Th 4:00pm - 6:45pm	SPH 0302

HLSA688 Independent Study

(Perm req)

Credits: 1-6 Grading Method: Regular,
Audit

Master or doctoral students who desire to pursue special research problems under the direction of a faculty member of the department may register for 1-6 hours of credit under this number.

Contact department for information to register for this course.

HLSA689 Field Work in Aging

Credits: 1-6 Grading Method: Regular

Individual instruction course.

0201	Lori Simon-Rusinowitz	Seats (Total: 5)
	Contact instructor or department for details.	

HLSA702 Policy and Politics of Health

Credits: 3 Grading Method: Regular,
Audit

Organizational and financial components of the U.S. health care system, including social and political forces that bind the system. Advanced political analysis of the health care system, including key issues and problems.

Although this is an online course, we will have one required in-person visit to Annapolis, Maryland to visit the state legislature organized by the instructor. In addition, there are three online synchronous Q&A sessions that students should participate in remotely and will be arranged by the instructor.

0101	Lori Simon-Rusinowitz	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

HLSA711 Health Economics and Analysis

Credits: 3 Grading Method: Regular,
Audit

Provides an analysis of health and health care services as economic goods. Using microeconomic theories, we will examine the behavior of health care providers, consumers, markets, and firms.

0101	Jie Chen	Seats (Total: 20)
	Tu 4:00pm - 6:45pm	PLS 1172

HLSA720

Health Law and Ethics

Credits: 3 Grading Method: Regular,
Audit

The legal system helps determine the relationships prevailing among individuals, institutions and governments by setting out the rights, duties and powers of the various parties. This course will look at some of the more important concepts the law uses within the context of health services and public health.

0101	Mathew Swinburne	Seats (Total: 25)
	M 4:00pm - 6:45pm	AJC 2134

HLSA724

Developing and Implementing Health Policy in Maryland

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in HLSA601.

Provides students with a thorough overview of Maryland's health care policymaking process, including critical analysis of legislative, regulatory, financing, and delivery factors that shape health care policy. Examination of major current and ongoing health care policy issues in the state of Maryland. Students will be given the opportunity to receive briefings from key stakeholders who will offer their insights into complex and controversial health care policy issues in Maryland.

0101	Mark Luckner	Seats (Total: 20)
	W 7:00pm - 9:45pm	SPH 0305

HLSA725

Econometrics in Public Health

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: EPIB650; or students who have taken courses with comparable content may contact the department. Additional information: priority enrollment will be given to students at the School of Public Health.

Empirical course to introduce students to econometric methods and their applications in public health.

0101	Luisa Franzini	Seats (Total: 20)
	Th 4:00pm - 6:45pm	Location: TBA

HLSA727 Advanced Econometrics for Public Health: Causal Inference in Health Services Research

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Permission of instructor. Or HLSA725; and HLSA790.

This course provides an overview of the conceptual and empirical tools used to infer causation in health and health care research. Advantages and limitations of experimental and quasi-experimental designs are discussed and students gain applied experience through replication exercises.

0101	Michel Boudreaux	Seats (Total: 20)
	W 4:00pm - 6:45pm	SPH 0227

HLSA745 Public Health Practice and Management

Credits: 3 Grading Method: Regular,
Audit

Examines the relationship of practice and management in performing essential public health services on local, state and national levels.

PLH1	Joseph Flannery	Seats (Total: 35)
	Class time/details on ELMs	ONLINE
	<i>Must be in Public Health Policy & Practice program. For permission to enroll, contact oes@umd.edu.</i>	

HLSA750 Healthcare Management Information Systems

Credits: 3 Grading Method: Regular,
Audit

Provides a background and overview of the analysis, design, evaluation, selection, installation, use, and management of information systems in health care settings. Students will review the information management function and value of information and the role of information technology in the provision of high quality care and management decision making. Details on computer hardware, software, networking, and telecommunications sufficient for understanding of concepts relevant to health care managers and staff will be addressed.

0501	Neil Sehgal	Seats (Total: 10)
	Meets August 26, 2019 - December 10, 2019	
	W 5:00pm - 7:40pm	VMH 1528

HLSA765 Dissertation Proposal Development Seminar

Credits: 3 Grading Method: Regular

Recommended: Completed all coursework related to one's dissertation topic; and identified in collaboration with one's dissertation advisor a topic area and potential data set. Restriction: Must be in Health Services Ph.D. (Doctoral) program; or permission of instructor. And must have passed departmental qualifying exam.

Designed to support doctoral students prepare their dissertation proposal and oral presentation. The course is structured around a literature synthesis and development of a modified AHRQ R36 grant application which includes developing a research question and hypotheses, a conceptual model, specific aims, background and significance, and research strategy. The importance of communicating complex ideas through oral and written forms will be emphasized.

0101	Eva DuGoff	Seats (Total: 15)
	Th 4:00pm - 6:45pm	SPH 0301

HLSA770 Continuous Quality Improvement in Healthcare

Credits: 3 Grading Method: Regular,
Audit

Designed for the health care professional or administrator involved in quality assurance in health care. Course includes historical beginnings, state-of-the-art, voluntary, governmental efforts, and tools to promote quality assurance.

0101	Robert Mekelburg	Seats (Total: 20)
	Tu 7:00pm - 9:45pm	SPH 0301

HLSA772 Healthcare Leadership and Communications

Credits: 3 Grading Method: Regular,
Audit

Health care administrators rely on transformational leadership skills and insights to help their organizations rise to the social financial, public health, and technological challenges of the future. Students will assess and develop their leadership strengths, apply key leadership communication principles, and critically analyze relevant leadership models, exploring their utility in addressing key leadership issues in health care organizations. An underlying theme will be the identification of core values involved in health care delivery, integration of those values in personal and organizational missions, and effective communication to stakeholders.

PLH1	Tracey Manning	Seats (Total: 25)	
	Class time/details on ELMs	ONLINE	
	Sa 9:00am - 5:00pm	Location: TBA	Discussion
	Su 9:00am - 4:00pm	Location: TBA	Discussion
<i>Must be in Public Health Policy & Practice program. For permission to enroll, contact oes@umd.edu. Class discussions are scheduled to meet at the College Park Campus as follows: September 7, 9am-5pm; September 8, 9am-4pm; Oct 19, 9am-5pm; December 7 9am-5pm; and December 8, 9am-4pm.</i>			

HLSA778 Internship in Public Health

Credits: 1-4 Grading Method: Regular,
Audit

Internship providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals

Contact department for information to register for this course.

HLSA785 Internship in Public Health

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of SPHL-Health Services Administration department. Credit only granted for: HLSA785 or HLSA778.

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

PLH1	Negin Fouladi	Seats (Total: 20)
Contact instructor or department for details.		
<i>Must be in Public Health Policy & Practice program. For permission to enroll, contact oes@umd.edu.</i>		

HLSA786 Capstone Project in Public Health

(Perm req) Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of SPHL-Health Services Administration department.

Capstone experience providing opportunity to apply knowledge and skills to a specific public health problem or issue. Completion of project relevant to public health under the direction of an advisor.

Contact department for information to register for this course.

HLSA790 Advanced Methods in Health Services Research

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: EPIB650 and EPIB651; or permission of instructor.

Provides an in-depth examination of health services research literature with emphasis on methodological scrutiny and application of methods beyond linear regression such as categorical regression, survival analysis, selection issues, and endogeneity.

0101	Kellee White	Seats (Total: 25)
	W 4:00pm - 6:45pm	ATL 2316

HLSA798 HLSA Journal Club

Credits: 1 Grading Method: Sat-Fail,
 Audit

The course will highlight current topics in health services research. Outside speakers will present their research in a few of the classes. For the other classes, graduate students in the HLSA programs will select important and timely articles that they will present to the class for discussion in an informal setting.

0101	Jie Chen	Seats (Total: 10)
	Th 12:00pm - 12:50pm	Location: TBA

HLSA799 Master's Thesis Research

(Perm req) Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

HLSA898 Pre-Candidacy Research

(Perm req) Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

HLSA899 Doctoral Dissertation Research

(Perm req)

Credits: 1-8

Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

HLSC Integrated Life Sciences

Fall 2019

HLSC100 Students in the University: Integrated Life Sciences

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in the Honors College Integrated Life Sciences program. Credit only granted for: EDCP108O, HLSC100, HONR100, or UNIV100H.

In a small classroom setting, Integrated Life Sciences students learn about academic resources on and off campus.

0101	Zabrina Anzyl	Seats (Total: 25)
	Tu 2:00pm - 3:15pm	LPA 0100
<i>For students in the Honors College Integrated Life Sciences Program only.</i>		
0102	Zabrina Anzyl	Seats (Total: 25)
	W 2:00pm - 3:15pm	LPA 0100
<i>For students in the Honors College Integrated Life Sciences Program only.</i>		
0103	Zabrina Anzyl	Seats (Total: 25)
	Th 2:00pm - 3:15pm	LPA 0100
0104	Zabrina Anzyl	Seats (Total: 25)
	F 2:00pm - 3:15pm	LPA 1125

HLSC207 Principles of Biology III Organismal Biology

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: (BSCI160 and BSCI161; or BSCI106); and (BSCI170 and BSCI171; or BSCI105). Or students who have taken courses with comparable content may contact the department. Restriction: Must be in the Honors College Integrated Life Sciences program. Credit only granted for: BSCI207, BSCI279D, or HLSC207.

The diversity, structure and function of organisms as understood from the perspective of their common physicochemical principles and unique evolutionary histories.

0101	Todd Cooke	Seats (Total: 96)
	MWF 9:00am - 9:50am	CCC 1205

HLSC374 Mathematical Modeling in Biology

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH131, MATH136, or MATH141. Cross-listed with BSCI374. Credit only granted for: BSCI374, BSCI474, or HLSC374. Additional information: The HLSC374 version of this course is restricted to students in the Honors College Integrated Life Sciences program.

Students will learn empowering mathematical techniques through the understanding of biological models. Models are chosen from a variety of biological disciplines. Mathematical skills that will be developed along the way include: solving non-linear difference equations, eigenvector analysis, and the implementation of these algorithms as computer models.

0101	Jonathan Simon	Seats (Total: 5)
	TuTh 9:30am - 10:45am	CCC 1105
	M 1:00pm - 3:50pm	CCC 1111 Lab

HLTH Health Fall 2019

HLTH106 Drug Use and Abuse

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An interdisciplinary analysis of contemporary drug issues and problems. The course will examine physiological, psychological, social, philosophical, historical, legal and health aspects of drug use and abuse. Special attention will be focused on those general motivations for drug use that attend life on the college campus.

Cross-listed with HLTH106H. Credit granted for HLTH106 or HLTH106H. Restricted to Majors or non-majors with less than or equal to 45 credits.

0101	Munjireen Sifat	Seats (Total: 60)
	MWF 10:00am - 10:50am	SPH 1301

HLTH106H Drug Use and Abuse

(Perm req) Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with HLTH106. Credit granted for HLTH106 or HLTH106H.

0101	Munjireen Sifat	Seats (Total: 60)
	MWF 10:00am - 10:50am	SPH 1301

HLTH124 Introduction to Behavioral and Community Health

Credits: 1 Grading Method: Regular, Audit

Restriction: Must be in a major within the SPHL-Behavioral & Community Health department.

Required of first semester Community Health majors to expose them to introductory-level concepts within the field of behavioral and community health as well as the Community Health degree program. Includes discussion on the delivery of behavioral and community health at the local, state, national, and global levels; career opportunities in the diverse sectors of the community health field; undergraduate programmatic information; and strategies for student success.

In-person meeting dates are TBD. See course Canvas/ELMS site for details .

0101	M Reynolds	Seats (Total: 80)
	M 1:00pm - 1:50pm	TWS 0310
	Class time/details on ELMs	ONLINE

HLTH140 Personal and Community Health

Credits: 3 Grading Method: Regular, Audit

Meaning and significance of physical, mental and social health as related to the individual and to society; important phases of national health problems; constructive methods of promoting health of the individual and the community.

Cross-listed with HLTH140H. Credit granted for HLTH140 or HLTH140H.

0101	James Butler	Seats (Total: 200)
	TuTh 9:30am - 10:45am	ESJ 0202

HLTH140H Personal and Community Health

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Meaning and significance of physical, mental and social health as related to the individual and to society; important phases of national health problems; constructive methods of promoting health of the individual and the community.

Cross-listed with HLTH140. Credit granted for HLTH140 or HLTH140H.

0101	James Butler	Seats (Total: 200)
	TuTh 9:30am - 10:45am	ESJ 0202

HLTH200 Introduction to Research in Community Health

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in a major within the SPHL-Behavioral and Community Health department.

An overview of specific components and steps involved in the community health research process. Content includes, foundations of research, sampling, measurement design, and analysis in a community context.

0101	Azieb Kidanu	Seats (Total: 120)
	MWF 2:00pm - 2:50pm	CHM 1402

HLTH230 Introduction to Health Behavior

Credits: 3 Grading Method: Regular, CORE: SB General Education: DSHS
Audit

Psychological, social psychological, and sociological approaches to the following health areas: development of health attitudes and behavior, patient-provider interaction and the organization of health care.

Restricted to Majors or non-majors with less than or equal to 45 credits. Students entering Fall 2018 or later: Prerequisite does not apply.

0101	Craig Fryer	Seats (Total: 96)
	TuTh 3:30pm - 4:45pm	ATL 2324

HLTH234 Global Health Messages: Understanding Exposure & Impact.

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit DVCC, SCIS

Using a global perspective, this course teaches students to be critical consumers of current and historical health communication interventions. It also provides students with the skills to develop media interventions that target specific and general populations. Students will discover the array of diverse media messages that influence the health and well-being of individuals and communities.

0101	Dina Borzekowski	Seats (Total: 40)
	Tu 3:30pm - 6:15pm	ESJ 1215

HLTH234H**Global Health Messages: Understanding Exposure & Impact.**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSHS,
DVCC, SCIS

Using a global perspective, this course teaches students to be critical consumers of current and historical health communication interventions. It also provides students with the skills to develop media interventions that target specific and general populations. Students will discover the array of diverse media messages that influence the health and well-being of individuals and communities.

0101	Dina Borzekowski	Seats (Total: 5)
	Tu 3:30pm - 6:15pm	ESJ 1215

HLTH246**The U.S. Tobacco Epidemic**

Credits: 3 Grading Method: Regular,
Audit

Tobacco is the leading cause of preventable death in the U.S. Course provides an overview of the tobacco epidemic including history, health effects, economic costs, policy, surveillance, and prevention, in addition to additional products like e-cigarettes, vaping and hookahs. .

0101	Azieb Kidanu	Seats (Total: 35)
	MWF 11:00am - 11:50am	SPH 0302

HLTH246H**The U.S. Tobacco Epidemic**

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Tobacco is the leading cause of preventable death in the U.S. Course provides an overview of the tobacco epidemic including history, health effects, economic costs, policy, surveillance, and prevention, in addition to additional products like e-cigarettes, vaping and hookahs. .

0101	Azieb Kidanu	Seats (Total: 5)
	MWF 11:00am - 11:50am	SPH 0302

HLTH264**Tweets & Likes: Digital Health & Social Media**

Credits: 3

Grading Method: Regular,
AuditGeneral Education: DSHS,
SCIS

Examines the current and potential use of digital health and social media to influence public health. Provides an overview of knowledge, skills and terminology necessary to optimize the effectiveness of these technologies to contribute to the enhancement of individual and community health.

Restricted to non-community health majors.

0101	Amara Channell Doig, Olivia Kachingwe	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	TYD 1132

HLTH264H**Tweets & Likes: Digital Health & Social Media**

(Perm req)

Credits: 3

Grading Method: Regular,
AuditGeneral Education: DSHS,
SCIS

Examines the current and potential use of digital health and social media to influence public health. Provides an overview of knowledge, skills and terminology necessary to optimize the effectiveness of these technologies to contribute to the enhancement of individual and community health.

0101	Amara Channell Doig	Seats (Total: 5)
	TuTh 11:00am - 12:15pm	TYD 1132

HLTH285**Controlling Stress and Tension**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: IE

General Education: DSHS

Health problems related to stress and tension. Analysis of causative psychosocial stressors and intervening physiological mechanisms. Emphasis on prevention and control of stress through techniques such as biofeedback, meditation and neuromuscular relaxation.

0101	Sharon Desmond	Seats (Total: 60)
	TuTh 8:00am - 9:15am	SPH 1303

HLTH289**Topical Investigations**

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Independent study by an individual student or an experimental course in special areas of knowledge not covered by regularly scheduled courses.

Contact department for information to register for this course.

HLTH292**Community Health Engagement**

Credits: 3 Grading Method: Regular,
Audit

General Education: DSSP

Restriction: Must not be in Community Health program.

An exploration and application of basic community health concepts. An integral part of the course is service learning, that includes evaluating, planning and implementing a community health program with a local community partner.

0101	Elizabeth Aparicio	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	SPH 1302

HLTH300**Biostatistics for Public Health Practice**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

General Education: FSAR

Prerequisite: Minimum grade of C- in EPIB301; or must have completed or be concurrently enrolled in HLTH200. Restriction: Must be in one of the following programs (Public Health Science; Community Health). Cross-listed with: EPIB315. Credit only granted for: EPIB300, EPIB315 or HLTH300. Formerly: EPIB300. Additional information: Course is cross-listed; students should check program advising information to determine which counts for their major. Note that EPIB300 (old number) is still offered for students under previous curriculum.

An examination of biostatistical concepts and procedures as they relate to contemporary issues in public health. Focus on applications, hands-on-experience, and interpretations of statistical findings in public health research.

Cross-listed with EPIB315. Credit granted for HLTH300 or EPIB315.

0201	Rodman Turpin	Seats (Total: 30)
	TuTh 11:00am - 11:50am	ESJ 0224
	M 4:00pm - 5:50pm	SPH 0121 Discussion
0202	Rodman Turpin	Seats (Total: 30)
	TuTh 11:00am - 11:50am	ESJ 0224
	F 12:00pm - 1:50pm	SPH 0121 Discussion

HLTH301**Epidemiology for Public Health Practice**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HLTH300. Restriction: Must be in Community Health program. Cross-listed with EPIB301. Credit only granted for: EPIB301 or HLTH301.

An examination of the discipline of epidemiology and its application to public health issues and practices, covering current epidemiological concepts and methods.

0201	Natalie Slopen	Seats (Total: 15)	
	TuTh 2:00pm - 2:50pm	SPH 1312	
	M 9:00am - 9:50am	SPH 0301	Discussion
0202	Natalie Slopen	Seats (Total: 15)	
	TuTh 2:00pm - 2:50pm	SPH 1312	
	W 1:00pm - 1:50pm	SPH 0301	Discussion
0203	Natalie Slopen	Seats (Total: 15)	
	TuTh 2:00pm - 2:50pm	SPH 1312	
	W 2:00pm - 2:50pm	SPH 0301	Discussion

HLTH302 Measuring Change in Community Based Research

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Minimum grade of C- in HLTH200 and EPIB301. Restriction: Must be in a major within the SPHL-Community Health Department.

Examination of research and evaluation tools that can be applied to community health promotion. Includes the application of qualitative research methods, community needs and strengths assessments, asset mapping, and monitoring and evaluating process, outcome and impact evaluation.

0101	Kirsten Stoebenau	Seats (Total: 45)	
	TuTh 3:30pm - 4:45pm	PHY 4221	

HLTH302H Measuring Change in Community Based Research

(Perm req) Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Minimum grade of C- in HLTH200 and EPIB301. Restriction: Must be in a major within the SPHL-Community Health Department.

Examination of research and evaluation tools that can be applied to community health promotion. Includes the application of qualitative research methods, community needs and strengths assessments, asset mapping, and monitoring and evaluating process, outcome and impact evaluation.

0101	Kirsten Stoebenau	Seats (Total: 5)	
	TuTh 3:30pm - 4:45pm	PHY 4221	

Macro Level Influences on Community Health

Prerequisite: Minimum grade of C- in HLTH124. Restriction: Must be in a major within the SPHL-Behavioral & Community Health department.

An examination of the effects and influences of policy decisions at the local, state and national levels on community health delivery. Historical and contemporary policy issues will be included with a focus on how the policies have impacted community organizations and the overall health of communities.

0101	Donna Howard	Seats (Total: 25)
	TuTh 8:00am - 9:15am	SPH 0302

Macro Level Influences on Community Health

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in HLTH124. Restriction: Must be in a major within the SPHL-Behavioral & Community Health department.

An examination of the effects and influences of policy decisions at the local, state and national levels on community health delivery. Historical and contemporary policy issues will be included with a focus on how the policies have impacted community organizations and the overall health of communities.

0101	Donna Howard	Seats (Total: 5)
	TuTh 8:00am - 9:15am	SPH 0302

Poor in America: Health and Wellbeing

Recommended: HLTH130; or HLTH140.

Using the ecological framework, students will explore the complicated relationship between poverty and health and well-being in the United States.

0101	Barbara Curbow	Seats (Total: 32)
	TuTh 3:30pm - 4:45pm	SPH 0307

Poor in America: Health and Wellbeing

Credits: 3 Grading Method: Regular, Audit

Recommended: HLTH130; or HLTH140.

Using the ecological framework, students will explore the complicated relationship between poverty and health and well-being in the United States.

0101	Barbara Curbow	Seats (Total: 3)
	TuTh 3:30pm - 4:45pm	SPH 0307

HLTH364 Social Media & Digital Tools for Community & Public Health

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: Completion of HLTH230 with a C- or higher. Restriction: Must be in a major within the SPHL-Behavioral and Community Health department; Restricted to majors who entered the program in Fall 2018 or later.

Examination of the characteristics and uses of media platforms and digital technologies to expand the capability to identify and reduce community and public health risks at all levels of prevention. Also considered will be the potential threats these new media can play on individual choice, privacy, confidentiality, and social influence -- which themselves can pose health threats to community and public health.

0101	Sandra Saperstein	Seats (Total: 45)
	TuTh 2:00pm - 3:15pm	TYD 2109
	<i>Prerequisite: HLTH230</i>	

HLTH364H Social Media & Digital Tools for Community & Public Health

(Perm req)

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: Completion of HLTH230 with a C- or higher. Restriction: Must be in a major within the SPHL-Behavioral and Community Health department; Restricted to majors who entered the program in Fall 2018 or later.

Examination of the characteristics and uses of media platforms and digital technologies to expand the capability to identify and reduce community and public health risks at all levels of prevention. Also considered will be the potential threats these new media can play on individual choice, privacy, confidentiality, and social influence -- which themselves can pose health threats to community and public health.

0101	Sandra Saperstein	Seats (Total: 5)
	TuTh 2:00pm - 3:15pm	TYD 2109

HLTH366**Behavioral and Community Issues in Public Health**

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: HLTH130, HLTH230, PSYC100, SOCY100, SOCY105, or ANTH260. Restriction: Must be in Public Health Science program; or permission of SPHL-Behavioral & Community Health department. And must have earned a minimum of 45 credits. Additional information: This course will initially be restricted to Public Health Science (PHSC) majors, but could ultimately be opened to other majors, particularly those in HLTH.

The exploration of how social and behavioral science theories and public health concepts and methods can be applied to both the health-illness experience and community interventions.

0101	Evelyn King-Marshall MW 2:00pm - 2:50pm Tu 9:30am - 10:20am	Seats (Total: 27) HJP 0226 SPH 0121 Discussion
0103	Evelyn King-Marshall MW 2:00pm - 2:50pm Tu 12:30pm - 1:20pm	Seats (Total: 27) HJP 0226 SPH 0121 Discussion
0105	Evelyn King-Marshall MW 2:00pm - 2:50pm W 10:00am - 10:50am	Seats (Total: 27) HJP 0226 SPH 0121 Discussion
0106	Evelyn King-Marshall MW 2:00pm - 2:50pm W 11:00am - 11:50am	Seats (Total: 27) HJP 0226 SPH 0121 Discussion
0107	Evelyn King-Marshall MW 2:00pm - 2:50pm W 12:00pm - 12:50pm	Seats (Total: 27) HJP 0226 SPH 0121 Discussion
0108	Evelyn King-Marshall MW 2:00pm - 2:50pm Th 9:30am - 10:20am	Seats (Total: 27) HJP 0226 SPH 0121 Discussion

HLTH371**Communicating Safety and Health**

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in a major within SPHL-Behavioral & Community Health department.

The communication and evaluation of safety and health information. Emphasis on various types of communications and recipient factors which contribute to their success or failure.

Cross-listed with HLTH371H. Credit granted for HLTH371 or HLTH371H.

0101	Devlon Jackson	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	ATL 1113
<i>Restriction: Must be a Community Health major.</i>		
0201	Devlon Jackson	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	ATL 1113
<i>Restriction: Must be a Public Health Science major.</i>		

HLTH371H

Communicating Safety and Health

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in a major within SPHL-Behavioral & Community Health department.

The communication and evaluation of safety and health information. Emphasis on various types of communications and recipient factors which contribute to their success or failure.

0101	Devlon Jackson	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	ATL 1113
0201	Devlon Jackson	Seats (Total: 35)
	TuTh 2:00pm - 3:15pm	ATL 1113

HLTH377

Human Sexuality

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The biological and developmental aspects of human sexuality; the psychological and emotional aspects of sexual behavior; sexual identity; the historical, cultural, social, linguistic, legal and moral forces affecting sexual issues; the importance of communication, disclosure and intimacy in interpersonal relationships; and research trends in the area of human sexuality.

Cross-listed with HLTH377H. Credit granted for HLTH377 or HLTH377H.

0101	Jenna Messman	Seats (Total: 200)
	MW 2:00pm - 3:15pm	KEY 0106

FC01	Bani Saluja	Seats (Total: 30)
	TuTh 7:30pm - 8:45pm	CHE 2136

HLTH377H Human Sexuality

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The biological and developmental aspects of human sexuality; the psychological and emotional aspects of sexual behavior; sexual identity; the historical, cultural, social, linguistic, legal and moral forces affecting sexual issues; the importance of communication, disclosure and intimacy in interpersonal relationships; and research trends in the area of human sexuality.

Cross-listed with HLTH377. Credit granted for HLTH377 or HLTH377H.

0101	Jenna Messman	Seats (Total: 200)
	MW 2:00pm - 3:15pm	KEY 0106

HLTH386 Experiential Learning

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Prerequisite: Permission of SPHL-Behavioral & Community Health department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

HLTH389 Topical Investigations

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Independent study by an individual student or an experimental course in special areas of knowledge not covered by regularly scheduled courses.

Contact department for information to register for this course.

HLTH391 Making a Difference: Applying Community Health

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSSP

Prerequisite: SPHL100, HLTH124, HLTH140, HLTH200, HLTH230, and EPIB301; and must have completed or be concurrently enrolled in HLTH302 and EPIB315. Restriction: Must be in a major within the SPHL-Behavioral and Community Health department.

The exploration and application of community health concepts including theoretical models, advocacy, cultural competency, asset mapping, and needs assessment. Includes planning, implementing and evaluating a community health program with a designated community partner.

Both sections (0101, 0201) shared with HLTH391H.

0201	James Butler	Seats (Total: 65)
	TuTh 12:30pm - 1:45pm	ESJ 0215

HLTH391H Making a Difference: Applying Community Health

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSSP

Prerequisite: SPHL100, HLTH124, HLTH140, HLTH200, HLTH230, and EPIB301; and must have completed or be concurrently enrolled in HLTH302 and EPIB315. Restriction: Must be in a major within the SPHL-Behavioral and Community Health department.

The exploration and application of community health concepts including theoretical models, advocacy, cultural competency, asset mapping, and needs assessment. Includes planning, implementing and evaluating a community health program with a designated community partner.

0201	James Butler	Seats (Total: 5)
	TuTh 12:30pm - 1:45pm	ESJ 0215

HLTH410 Honors Seminar

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: HLTH200; and must have completed 2 other courses in HLTH. Restriction: Minimum cumulative GPA of 3.5; and must have completed 45 credits before applying.

Undergraduate majors with a strong academic record are provided the opportunity to engage in challenging educational experiences related to the social and behavioral aspects of public health. Students will learn the skills and knowledge to develop, propose, defend, and complete an honors thesis or honors project.

0101	Kerry Green	Seats (Total: 12)
	M 12:00pm - 3:00pm	Location: TBA

HLTH420 Effective Strategies for Public Health Practice

(Perm req)

Credits: 3 Grading Method: Regular,
Audit General Education: FSOC

Prerequisite: Minimum grade of C- in BSCI170, BSCI171, BSCI201, and HLTH391. Corequisite: HLTH490. Restriction: Must be in a major within the SPHL-Behavioral and Community Health department.

The purpose of this course is to present the interrelationships of curriculum planning, methodology and the selection and use of successful public health presentation strategies. Special problems associated with public health presentations are discussed, and students become familiar with a variety of resources as well as with planning for and implementing demonstration presentations.

0101	M Reynolds	Seats (Total: 20)
	TuTh 9:30am - 10:45am	SPH 0303
0201	M Reynolds	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	SPH 0301
0301	M Reynolds	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	SPH 0308

HLTH434

Introduction to Public Health Informatics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in one of the following programs (Community Health; Public Health Science) ; and must have earned a minimum of 60 credits. Credit only granted for: HLTH434 or HLTH498E. Formerly: HLTH498E.

Provides an overview of the field of public health informatics and the influence of technology on the public's health and well-being. Emphasizes the application of various technologies and computer/internet applications to support public health research and practice, including strategies to address new and emerging threats.

0101	Sandra Saperstein	Seats (Total: 11)
	W 4:00pm - 6:45pm	SPH 0302
<i>Restriction: Must be a major in Behavioral and Community Health department.</i>		
0201	Sandra Saperstein	Seats (Total: 29)
	W 4:00pm - 6:45pm	SPH 0302
<i>Restriction: Must be a Public Health Science major.</i>		

HLTH434H

Introduction to Public Health Informatics

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in one of the following programs (Community Health; Public Health Science) ; and must have earned a minimum of 60 credits. Credit only granted for: HLTH434 or HLTH498E. Formerly: HLTH498E.

Provides an overview of the field of public health informatics and the influence of technology on the public's health and well-being. Emphasizes the application of various technologies and computer/internet applications to support public health research and practice, including strategies to address new and emerging threats.

0101	Sandra Saperstein	Seats (Total: 5)
	W 4:00pm - 6:45pm	SPH 0302

HLTH460

Minority Health

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: HLTH140, HLTH230, or HLTH366; or permission of SPHL-Behavioral & Community Health department. Restriction: Must be in a major within the SPHL-Behavioral & Community Health department.

Health concerns of U.S. ethnic minority groups and factors placing them at elevated risk for disease and injury. Health education concepts and strategies to reduce disparities between their health status and the health status of the general population.

Cross-listed with HLTH460H. Credit granted for HLTH460 or HLTH460H.

0101	Craig Fryer	Seats (Total: 20)
	W 4:00pm - 6:45pm	SPH 1302
<i>Restriction: Must be a major in Behavioral and Community Health department.</i>		
0201	Craig Fryer	Seats (Total: 31)
	W 4:00pm - 6:45pm	SPH 1302
<i>Restriction: Must be a Public Health Science major.</i>		

HLTH460H

Minority Health

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: HLTH140, HLTH230, or HLTH366; or permission of SPHL-Behavioral & Community Health department. Restriction: Must be in a major within the SPHL-Behavioral & Community Health department.

Health concerns of U.S. ethnic minority groups and factors placing them at elevated risk for disease and injury. Health education concepts and strategies to reduce disparities between their health status and the health status of the general population.

Cross-listed with HLTH460. Credit granted for HLTH460 or HLTH460H.

0101	Craig Fryer	Seats (Total: 5)
	W 4:00pm - 6:45pm	SPH 1302

HLTH489 Field Laboratory Projects and Workshop

(Perm req)

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

A course designed to meet the needs of persons in the field with respect to workshop and research projects in special areas of knowledge not covered by regularly structured courses.

Contact department for information to register for this course.

HLTH490 Professional Preparation in Community Health

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in BSCI170, BSCI171, BSCI201, and HLTH391. Corequisite: HLTH420. Restriction: Must be in a major within the SPHL-Behavioral and Community Health department.

The development of skills necessary for joining the public health work force post-graduation, as well as assistance in obtaining an appropriate internship that will serve as a final semester, capstone experience. Students will be exposed to various relevant professional experiences, and will be afforded the opportunity to strengthen their own individual skills by selecting from a menu of skills-based learning modules that best suit their perceived needs.

0101	Tracy Zeeger	Seats (Total: 28)
	TuTh 11:00am - 12:15pm	SPH 0121
0201	Tracy Zeeger	Seats (Total: 28)
	TuTh 12:30pm - 1:45pm	ATL 1114

HLTH491 Community Health Internship

(Perm req)

Credits: 12 Grading Method: Regular

Prerequisite: Minimum grade of C- in HLTH420 and HLTH490. Restriction: Must have completed all program requirements and be in the last semester of the Community Health degree program.

Integrating theory with practice in a community health setting.

0101	Tracy Kennedy	Seats (Total: 60)
	Contact instructor or department for details.	

HLTH492 **BS/MPH Community Internship**

Credits: 9 Grading Method: Regular

Prerequisite: Minimum grade of C- in HLTH490. Restriction: Must be a Community Health major who has been admitted to the combined BS/MPH degree program.

Integrating theory with practice in a community health setting.

0101	Tracy Kennedy	Seats (Total: 10)
	Contact instructor or department for details.	

HLTH652 **Quantitative Research Methods I in Public health**

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in MPH: Community Health Education (Master's) program; or must be in Ph.D.: Public and Community Health (Doctoral) program. Credit only granted for: HLTH652 or HLTH688R. Formerly: HLTH688R.

Intermediate statistics and procedures in public health-related research for doctoral students. Focuses on applied statistics rather than theoretical, with emphasis on 1) how to apply statistical models, 2) how to perform the analysis with available software, and 3) how to interpret findings.

0101	Timothy Tilert	Seats (Total: 10)
	Tu 4:00pm - 6:45pm	SPH 0301

HLTH672 **Public Health Informatics**

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Instructor permission is required for students not enrolled in a degree seeking program in the School of Public Health. Cross-listed with EPIB672. Credit only granted for: HLTH670 or HLTH671, HLTH672, EPIB 672. Formerly: HLTH670. Additional information: Course hashtag - #umdphi12.

A basic overview of Informatics and its application in a public health setting. The major goal is for students to understand the basic tools and building blocks needed to utilize this technology in order to improve their professional productivity

0101	Sandra Saperstein, Robert Gold	Seats (Total: 25)
	Tu 7:00pm - 9:45pm	SPH 0116A

HLTH688**Special Problems in Health Education**

(Perm req)

Credits: 1-6

Grading Method: Regular,
Audit**Contact department for information to register for this course.**

HLTH688L**Special Problems in Health Education; Health Literacy**

Credits: 3

Grading Method: Regular,
Audit

0101	Cynthia Baur	Seats (Total: 25)
	W 4:00pm - 6:45pm	SPH 1242A

HLTH710**Methods and Techniques of Research**

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

0101	Kenneth Beck	Seats (Total: 25)
	Tu 4:00pm - 6:45pm	SPH 1302

HLTH712**Applied Research Methods in Behavioral and Community Health**

(Perm req)

Credits: 3

Grading Method: Regular,
Audit*Prerequisite: HLTH710.*

Designed to build on the research skills obtained in HLTH710 and other fundamental research methods and statistics courses. Methods and problems that are commonly encountered in health education research will be discussed including examination of actual research studies. Complex behavioral research issues will be addressed with existing research data sets. With these data sets, students will develop an analytic plan and conduct data analysis.

0101	Bradley Boekeloo	Seats (Total: 10)
	M 4:00pm - 6:45pm	SPH 0301

HLTH776**Community Health Program Evaluation**

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: HLTH710 and HLTH774. Restriction: Must be in a major within SPHL-Behavioral & Community Health department; or permission of instructor. Credit only granted for: HLTH775 or HLTH774 and HLTH776. Formerly: HLTH775.

An application of basic research methods, and the evaluation of community health programs. Students will evaluate the effectiveness of a community health intervention.

0101	Amelia Arria	Seats (Total: 25)
	Th 4:00pm - 6:45pm	SPH 0308

HLTH778 Internship in Public Health

Credits: 1-4 Grading Method: Regular

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

0101	Evelyn King-Marshall	Seats (Total: 10)
	M 7:00pm - 9:00pm	SPH 0303

HLTH780 Community Health

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: HLTH740 or HLTH780.

Overview of public health organizations, programs, and policies, including their structure and function, and their ability to change with changing community health needs.

0101	Sharon Desmond	Seats (Total: 25)
	Th 4:00pm - 6:45pm	SPH 1302

HLTH785 Internship in Public Health

Credits: 3 Grading Method: Regular

Prerequisite: HLTH665, HLTH775, and HLTH780; or permission of SPHL-Behavioral & Community Health department. Credit only granted for: HLTH785 or HLTH778.

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

Class meets on Mondays 7:00-9:00pm.

0101	Evelyn King-Marshall	Seats (Total: 15)
	M 7:00pm - 9:00pm	SPH 0303
	Contact instructor or department for details.	

HLTH786 Capstone Project in Public Health

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have completed all required coursework; and permission of SPHL-Behavioral & Community Health department. Restriction: Must be in a major within SPHL-Behavioral & Community Health department.

Capstone experience providing opportunity to apply knowledge and skills to a specific public health problem or issue. Completion of project relevant to public health under the direction of an advisor.

Contact department for information to register for this course.

HLTH799 Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

HLTH898 Pre-Candidacy Research

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

HLTH899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

HONR Honors**Fall 2019****HONR100 Honors Colloquium**

Credits: 1 Grading Method: Regular

Restriction: Permission of University Honors Program.

Attendance at various additional activities and events is required. Reading and discussion on the personal and social value of higher education; development of a coherent general education program; exploration of the educational and cultural resources of the campus and metropolitan area; participation in a community service project; and other activities designed to broaden students' conception of what it means to be an educated person.

HONR100 is restricted to first semester University Honors students only.

0101	Susanna Underland, Dean Hebert	Seats (Total: 16)
	M 4:00pm - 5:30pm	SQH 1125

0102	Susanna Underland, Dean Hebert M 4:00pm - 5:30pm	Seats (Total: 16) JMZ 0103
0103	Susanna Underland, Dean Hebert M 4:00pm - 5:30pm	Seats (Total: 16) WDS 1127
0104	Dean Hebert, Susanna Underland M 4:00pm - 5:30pm	Seats (Total: 16) KEY 0117
0105	Susanna Underland, Dean Hebert M 4:00pm - 5:30pm	Seats (Total: 16) HBK 0103
0106	Dean Hebert, Susanna Underland M 4:00pm - 5:30pm	Seats (Total: 16) HAG 1112
0107	Dean Hebert, Susanna Underland M 4:00pm - 5:30pm	Seats (Total: 16) LEF 1221
0108	Dean Hebert, Susanna Underland M 4:00pm - 5:30pm	Seats (Total: 16) LPA 1125
0109	Susanna Underland, Dean Hebert M 4:00pm - 5:30pm	Seats (Total: 16) JMZ 1226
0110	Susanna Underland, Dean Hebert M 4:00pm - 5:30pm	Seats (Total: 16) LEF 1222
0201	Susanna Underland, Dean Hebert Tu 3:30pm - 4:45pm	Seats (Total: 16) JMZ 0122
0202	Susanna Underland, Dean Hebert Tu 3:30pm - 4:45pm	Seats (Total: 16) HAG 1112
0203	Susanna Underland, Dean Hebert Tu 3:30pm - 4:45pm	Seats (Total: 16) JMZ 0118
0204	Susanna Underland, Dean Hebert Tu 3:30pm - 4:45pm	Seats (Total: 16) SQH 1125
0205	Susanna Underland, Dean Hebert Tu 3:30pm - 4:45pm	Seats (Total: 16) HAG 1125

0206	Susanna Underland, Dean Hebert Tu 3:30pm - 4:45pm	Seats (Total: 16) JMZ 0125
0207	Dean Hebert, Susanna Underland Tu 3:30pm - 4:45pm	Seats (Total: 16) JMZ 1215
0208	Susanna Underland, Dean Hebert Tu 3:30pm - 4:45pm	Seats (Total: 16) PLS 1164
0209	Dean Hebert, Susanna Underland Tu 3:30pm - 4:45pm	Seats (Total: 16) WDS 1114
0210	Dean Hebert, Susanna Underland Tu 3:30pm - 4:45pm	Seats (Total: 16) JMZ 2120
0211	Susanna Underland, Dean Hebert Tu 3:30pm - 4:45pm	Seats (Total: 16) ARC 1123
0212	Dean Hebert, Susanna Underland Tu 3:30pm - 4:45pm	Seats (Total: 16) ANA 0120
0213	Dean Hebert, Susanna Underland Tu 3:30pm - 4:45pm	Seats (Total: 16) WDS 1127
0214	Susanna Underland, Dean Hebert Tu 3:30pm - 4:45pm	Seats (Total: 16) EGR 1110
0215	Susanna Underland, Dean Hebert Tu 3:30pm - 4:45pm	Seats (Total: 16) KEY 0121
0216	Dean Hebert, Susanna Underland Tu 3:30pm - 4:45pm	Seats (Total: 16) KEY 0124
0301	Susanna Underland, Dean Hebert W 4:00pm - 5:30pm	Seats (Total: 16) TWS 1321
0302	Susanna Underland, Dean Hebert W 4:00pm - 5:30pm	Seats (Total: 16) JMZ 0103
0303	Susanna Underland, Dean Hebert W 4:00pm - 5:30pm	Seats (Total: 16) JMZ 2123

HONR208G Honors Seminar; The Best School Systems in the World (and Why the U.S. is Not Included)

Credits: 3 Grading Method: Regular

0101	Donna Wiseman	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	HBK 0109

HONR208L Honors Seminar; Justice Matters: Law, Literature, and Film

Credits: 3 Grading Method: Regular

General Education: DSHU,
SCIS

0101	Sara Schotland	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	PLS 1146

HONR208M Honors Seminar: Utopia and Dystopia: Reality and Relevance

Credits: 3 Grading Method: Regular

CORE: HO

General Education: DSHU,
SCIS

0101	Sara Schotland	Seats (Total: 20)
	Tu 12:30pm - 3:00pm	HBK 0103

HONR209I Honors Seminar; A College Degree: Worthwhile Investment or Fool's Errand?

Credits: 3 Grading Method: Regular

General Education: DSHS,
SCIS

Students may receive credit for either ECON 155 or HONR? 209I, but not both.

0101	Cindy Clement	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	TYD 2102

HONR209O The Science of Sleep and Biological Rhythms

Credits: 3 Grading Method: Regular

CORE: LS

General Education: DSNS

0101	David Yager	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	TYD 2111

HONR217 Life, The Multiverse and Everything: Developing an Individual Cosmvision

Credits: 3 Grading Method: Regular

CORE: HO, D

General Education: DSHU

In this Honors seminar, students pursue personal cosmologies in light of our contemporary core "Western" scientific world-view and a selection of other ancient and indigenous cosmographies for comparison including those of Mesoamerica, the Inca, the Egyptians or the Chinese.

0101	John Carlson	Seats (Total: 20)
	Tu 7:00pm - 9:30pm	LPA 0124
0201	John Carlson	Seats (Total: 20)
	W 7:00pm - 9:30pm	LPA 0124

HONR218B Honors Seminar; Making a Difference: The Lives and Words of Leaders Who Shape Our Time

Credits: 3 Grading Method: Regular General Education: DSHU, SCIS

0101	Kevin Klose	Seats (Total: 23)
	TuTh 9:30am - 10:45am	KNI 1206

HONR218J Honors Seminar; Sustainability and Development: From the Individual to the Global

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

0101	Dorith Grant-Wisdom	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	JMZ 3205

HONR218L Honors Seminar: Language and Mind

Credits: 3 Grading Method: Regular CORE: HO General Education: DSHU

0101	Andrea Zukowski	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	KEY 0125

HONR218M Honors Seminar; Elements of Music Composition for Non-Majors

Credits: 3 Grading Method: Regular General Education: DSSP

0101	William Evans	Seats (Total: 18)
	Tu 2:00pm - 4:30pm	PAC 1108
0201	William Evans	Seats (Total: 18)
	Tu 5:30pm - 8:00pm	PAC 1108

HONR218P Honors Seminar; Immigration: Personal Stories and Policy Changes

Credits: 3

Grading Method: Regular

General Education: DSHU,
DVUP, SCIS

0101	Sara Schotland	Seats (Total: 20)
	Th 2:00pm - 4:30pm	JMZ 1117

HONR218T Honors Seminar; Political Theater: On Stage and in Washington

Credits: 3

Grading Method: Regular

General Education: DSHU

This seminar may have a fee of up to \$40.

0101	Nelson Pressley	Seats (Total: 20)
	TuTh 9:30am - 10:45am	SQH 1111

HONR218V Honors Seminar; Disability Culture and Life Narratives

Credits: 3

Grading Method: Regular

General Education: DSHS

0101	Jessica McKechnie	Seats (Total: 20)
	M 2:00pm - 4:30pm	KNI 1103

HONR228J Honors Seminar; The Caribbean Amidst the Global: Interrogating Issues of Pirates and Piracy

Credits: 3

Grading Method: Regular

General Education: DSHS,
DVUP, SCIS

0101	Dorith Grant-Wisdom	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	JMZ 2123

HONR228O Honors Seminar; Are We Down to Earth? Imagining Our Planetary Futures in Times of Climate Change

Credits: 3

Grading Method: Regular

0101	Katharina Luther	Seats (Total: 19)
	TuTh 2:00pm - 3:15pm	WDS 1130

HONR229L Honors Seminar; Climate Change: Science, Economics, and Governance

Credits: 3

Grading Method: Regular

General Education: DSNS,
SCIS

0101	Ross Salawitch	Seats (Total: 21)
	TuTh 12:30pm - 1:45pm	ATL 3408

HONR229Q Honors Seminar; Making Decisions in an Uncertain World

Credits: 3	Grading Method: Regular	General Education: DSSP
0101	Michael Fu	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	VMH 2509

HONR229Z Honors Seminar; Trickster, Slacker, Clown, Fool: Fiction Seminar and Workshop

Credits: 3	Grading Method: Regular	General Education: DSHU
0101	Thibault Raoult	Seats (Total: 20)
	MW 2:00pm - 3:15pm	JMZ 0205

HONR238C The Future of Energy and Climate Policy

Credits: 3	Grading Method: Regular	CORE: IE	General Education: DSSP
0101	Tyson Slocum	Seats (Total: 20)	
	W 3:00pm - 5:30pm	ESJ 1309	

HONR238N Honors Seminar; Public Health and Contemporary Health Issues: Saving Lives Millions at a Time

Credits: 3	Grading Method: Regular	General Education: DSHS
0101	Kirsten Stoebenau	Seats (Total: 20)
	W 1:00pm - 3:45pm	SPH 1234A

HONR238R Honors Seminar: Terrorism

Credits: 3	Grading Method: Regular	CORE: SH	General Education: DSHS
0101	Howard Smead	Seats (Total: 20)	
	M 4:00pm - 6:30pm	SQH 2113	

HONR238Z Honors Seminar; Gladiators and Caesars: The Archaeology of Roman Spectacle

Credits: 3	Grading Method: Regular	General Education: DSHU
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0101	Maryl Gensheimer	Seats (Total: 20)
	Th 2:00pm - 4:30pm	ASY 4213

HONR239B Honors Seminar: New York City and the American Dream

Credits: 3 Grading Method: Regular CORE: HL General Education: DSHU, DVUP

0101	Ingrid Satelmajer	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	KNI 1103

HONR239D Honors Seminar; Introduction to Printmaking

Credits: 3 Grading Method: Regular General Education: DSSP

Students must pay a \$40.00 studio lab fee.

0101	Matthew McLaughlin	Seats (Total: 12)
	MW 3:30pm - 6:00pm	ASY 1317

HONR239G We, the Readers: American Literature for an American Democracy

Credits: 3 Grading Method: Regular CORE: HL, D General Education: DSHU, SCIS

0101	Robert Chiles	Seats (Total: 20)
	Th 6:00pm - 8:30pm	KEY 0124

HONR239N Honors Seminar; Colonial Consequences: American Archaeology in the Era of Colonialism

Credits: 3 Grading Method: Regular General Education: DSHS, DVUP

0101	Barnet Pavao-Zuckerman	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	WDS 0104

HONR248H Honors Seminar: From Willowbrook to Attica: Delinquency in the Context of Disability

Credits: 3 Grading Method: Regular CORE: SB, D General Education: DSHS, DVUP

0101	Peter Leone	Seats (Total: 20)
	M 1:00pm - 3:50pm	HBK 0103

HONR248J Honors Seminar; A Most Human Nation

Credits: 3 Grading Method: Regular

General Education: DSHU,
DVUP, SCIS

Students who have taken HHUM205 should contact the instructor for permission.

0101	Ingrid Satelmajer	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	JMZ 0103

HONR249D Honors Seminar; How Can We Study Environmental Problems?

Credits: 3 Grading Method: Regular

General Education: DSHS

0101	Dana Fisher	Seats (Total: 20)
	MW 2:00pm - 3:15pm	JMZ 2206

HONR249L The Historical Development of London

Credits: 3 Grading Method: Regular CORE: SH

Contact department for information to register for this course.

HONR258E Honors Seminar; Creating the Future through Systemic Thinking and Design

Credits: 3 Grading Method: Regular

General Education: DSSP

0101	Gerald Suarez	Seats (Total: 20)
	MW 3:30pm - 4:45pm	ASY 3221

HONR258O Honors Seminar; The Kinesiological Bases of Skilled Performance

Credits: 3 Grading Method: Regular

0101	Seppo Iso-Ahola	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	SPH 0303

HONR258R Honors Seminar; Soundtrack to Revolution: Black Protest Music from the Slave Ship to Soundcloud

Credits: 3 Grading Method: Regular

General Education: DSHU,
DVUP

0101	La Marr Bruce	Seats (Total: 20)
	Tu 3:30pm - 6:00pm	TWS 1313

HONR258T Honors Seminar: Tools of Fiction: Literature and/as Creative Writing

Credits: 3 Grading Method: Regular CORE: HL General Education: DSHU

0101	Dean Hebert	Seats (Total: 20)
	TuTh 5:00pm - 6:15pm	LPA 0124

HONR258X How People Do Things with Words: Discourse and Pragmatics in Japanese and English

Credits: 3 Grading Method: Regular CORE: HO, D General Education: DSHU

No previous knowledge of Japanese required.

0101	Lindsay Yotsukura	Seats (Total: 20)
	MW 2:00pm - 3:15pm	HBK 0108

HONR259C Honors Seminar: Fearfully Great Lizards: Topics in Dinosaur Research

Credits: 3 Grading Method: Regular CORE: PS General Education: DSNS

0101	Thomas Holtz	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	ESJ 1309

HONR259G Honors Seminar; Fairness, Inequality, and Democracy

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

0101	Allan Drazen	Seats (Total: 20)
	MW 2:00pm - 3:15pm	TYD 1118

HONR268L Honors Seminar: United States Immigration Issues

Credits: 3 Grading Method: Regular CORE: SB, D General Education: DSHS, DVUP, SCIS

0101	Dorith Grant-Wisdom	Seats (Total: 20)
	W 1:00pm - 3:30pm	ANA 0120

HONR268N Honors Seminar; Cracking the Secrets of the Universe Using Computers: Re-discovering the Higgs and Searching for Invisible Matter

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSNS, DSSP, SCIS

This course is part of a two-semester Honors research seminar. Part two of this series will be offered in the Spring 2019 Semester. For more information about the course, please visit physics.umd.edu/courses/Honr268N/. For permission to enroll, please contact Dr. Shabnam Jabeen at Jabeen@umd.edu.

0101	Sarah Eno, Shabnam Jabeen	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	PHY 3301

HONR269T Honors Seminar: Understanding U.S. Foreign Policy toward Afghanistan

Credits: 3 Grading Method: Regular CORE: SB, D General Education: DSHS, SCIS

This is a Global Classroom course. There will be approximately 3 to 4 classes where this course will meet on a Saturday or Sunday morning for videoconferencing with students in Kabul, Afghanistan instead of meeting at its normal weekly time on Thursday nights (exact dates and times are TBA).

0101	Temim Nusraty	Seats (Total: 10)
	Th 6:30pm - 9:00pm	ANA 0120

HONR269V Honors Seminar; Virus Hunting: Emerging Diseases, Social Controversies and Nano-Technologies

Credits: 3 Grading Method: Regular General Education: DSNS

0101	James Culver	Seats (Total: 20)
	TuTh 9:30am - 10:45am	PLS 5112

HONR278D Honors Seminar; National Security Dilemmas

Credits: 3 Grading Method: Regular General Education: DSHS, SCIS

0101	Daniel Rosenthal	Seats (Total: 20)
	M 7:10pm - 9:55pm	TWS 1320

HONR278G Honors Seminar; Exploring How Foreign Policy Is Developed

Credits: 3 Grading Method: Regular General Education: DSHS

0101	Temim Nusraty	Seats (Total: 20)
	M 6:30pm - 9:00pm	ANA 0120

HONR278I Honors Seminar; Liberalism, Discontent, and Outcasts: Who is Left Out?

Credits: 3 Grading Method: Regular General Education: DSHS

0101	James Glass	Seats (Total: 20)
	W 3:30pm - 6:00pm	TYD 0102

HONR278Q Honors Seminar; Biodiversity Matters: Effects on Health, National Security, Development, and Design

Credits: 3 Grading Method: Regular General Education: DSNS

0101	Karen Lips	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	PLS 1164

HONR278Z Honors Seminar; The Philosophy and Practice of YogaCredits: 3 Grading Method: Regular General Education: DSHU,
SCIS

0101	Susan Dwyer	Seats (Total: 25)
	Tu 9:30am - 10:45am	SQH 1121
	Th 9:30am - 10:45am	PKT 2102

HONR279K Honors Seminar; Magic, Science, and ReligionCredits: 3 Grading Method: Regular General Education: DSHU,
SCIS

0101	Maxine Grossman	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	TWS 1313

HONR288O Honors Seminar: Why Do Things Fail?Credits: 3 Grading Method: Regular CORE: PS General Education: DSNS,
SCIS

This course is open only to non-engineering majors. High school math and science are adequate for understanding of the material.

0101	Kevin Calabro	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ASY 3221
0201	Kevin Calabro	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	PLS 1115

HONR289N Honors Seminar; From Fat to Fit to Olympic Gold: Physical Activity in health and Human Performance

Credits: 3 Grading Method: Regular General Education: DSNS, SCIS

0101	Colleen Farmer	Seats (Total: 20)
	W 2:00pm - 4:30pm	SPH 0308

HONR298W Honors Seminar; Political Disagreement and the Limits of Toleration

Credits: 3 Grading Method: Regular

0101	Brian Kogelmann	Seats (Total: 20)
	M 4:00pm - 6:30pm	HBK 0108

HONR299C Honors Seminar; Fashion and Costumes Through the Ages

Credits: 3 Grading Method: Regular General Education: DSHU

0101	Mikhail Kachman	Seats (Total: 20)
	TuTh 3:00pm - 4:15pm	PAC 1809

HONR299F Honors Seminar; Financial Crises: The Foundation of Global Tension

Credits: 3 Grading Method: Regular General Education: DSSP, SCIS

0101	Behzad Gohari	Seats (Total: 20)
	W 6:00pm - 8:30pm	ESJ 2212

HONR299G Honors Seminar; Revolution, Regret, and Reform: The People and Principles of the American Political Tradition

Credits: 3 Grading Method: Regular General Education: DSHS

0101	Robert Chiles	Seats (Total: 20)
	MW 11:00am - 12:15pm	LEF 1171

HONR299H Honors Seminar; Cutting Edge Science: Understanding Current Scientific Issues

Credits: 3 Grading Method: Regular General Education: DSNS

0101	Boualem Hammouda	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	ASY 3221

HONR299I Honors Seminar; The Practice of Science in an Age of Truthiness

Credits: 3 Grading Method: Regular General Education: DSNS, SCIS

0101	Christopher Capp	Seats (Total: 20)
	TuTh 9:30am - 10:45am	JMZ 1103

HONR348D Advanced Honors Seminar; Innovation and Social Change: Do Good Now

Credits: 3 Grading Method: Regular General Education: DSSP, SCIS

A series of seminars, often interdisciplinary and sometimes team taught. The subjects will vary from semester to semester.

0101	Toby Egan	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	TWS 1321

HONR348J Advanced Honors Seminar; Contemporary Social Issues

Credits: 3 Grading Method: Regular General Education: DVCC

A series of seminars, often interdisciplinary and sometimes team taught. The subjects will vary from semester to semester.

0101	Howard Smead	Seats (Total: 20)
	W 4:00pm - 6:30pm	TLF 1103

HONR349V Honors Colloquium; Dubai: Global Immersion Experience

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

A series of seminars, often interdisciplinary and sometimes team taught. Subjects may vary.

Contact department for information to register for this course.

HONR358A Honors Practicum

Credits: 3 Grading Method: Sat-Fail

For student section leaders of HONR100 or HONR200.

Contact department for information to register for this course.

HONR358B Honors Practicum

Credits: 3 Grading Method: Sat-Fail

For student section leaders of HONR100 or HONR200.

Contact department for information to register for this course.

HONR358C Honors Practicum

Credits: 3 Grading Method: Sat-Fail

For student section leaders of HONR100 or HONR200.

Contact department for information to register for this course.

HONR359A Honors Workshop

Credits: 3 Grading Method: Sat-Fail

Honors workshops are small seminar classes which concentrate on skill development.

Contact department for information to register for this course.

HONR359B Honors Workshop; Alternatives to Violence

Credits: 3 Grading Method: Sat-Fail

Honors workshops are small seminar classes which concentrate on skill development.

0101	Colman McCarthy	Seats (Total: 20)
	M 12:00pm - 2:30pm	ANA 0120

HONR359L Honors Workshop; Leading Honors Colloquium

(Perm req)

Credits: 2 Grading Method: Sat-Fail

Honors workshops are small seminar classes which concentrate on skill development.

Contact department for information to register for this course.

HONR368A Advanced Honors Seminar; MGA Legislative Seminar

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

General Education: FSPW

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Cross-listed with ENGL381. Credit only granted for one of the following: ENGL381 or HONR368A. Admission to this course is by application only.

0101	Thomas Lowderbaugh	Seats (Total: 15)
	Tu 3:30pm - 6:00pm	TWS 0232

HONR378A Advanced Honors Seminar; U.S. Diplomacy and Policymaking

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Jointly offered with FGSM 360. Credit granted for FGSM360 or HONR378A. Students must be in the Global Fellows Program to register.

0101	William Usher	Seats (Total: 20)
	Th 7:30pm - 10:00pm	ESJ 1309

HONR378B Advanced Honors Seminar; Responses to Global Challenges

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Cross-listed with FGSM380. Credit granted for FGSM380 or HONR378B. Students must be in the Global Fellows Program to register. An examination of global issues and responses primarily from the perspective of the practitioner. The focus will be on social, humanitarian, and human rights issues in different global contexts.

0101	Rhoda Margesson	Seats (Total: 20)
	W 5:30pm - 8:30pm	AJC 2134

HONR378C Advanced Honors Seminar; Political Engagement and Advocacy

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Students must be in the Federal Fellows Program to register. Also offered as FGSM310. Credit only granted for FGSM310 or HONR378C.

0101	Dale Crowell	Seats (Total: 25)
	M 6:30pm - 9:30pm	PLS 1111

HONR378D Advanced Honors Seminar; Science Diplomacy: Foreign Policy and Science, Technology, and Innovation

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Cross-listed with FGSM370. Credit granted for FGSM370 or HONR378D. Students must be in the Global Fellows Program to register. An exploration of the critical roles scientific knowledge and technological innovation play in the formation and implementation of foreign policy issues, including energy and climate change, public health, space and innovation, and economic development.

0101	Jonathan Margolis, Griffin Thompson	Seats (Total: 20)
	W 5:30pm - 8:30pm	SQH 1101

HONR378E Advanced Honors Seminar; Public Health Policy

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Students must be in the Federal Fellows Program to register. Cross-listed with FGSM320. Credit granted for FGSM320 or HONR378E.

0101	Samuel Kessel, Elaine Anderson	Seats (Total: 20)
	Tu 3:30pm - 6:30pm	SPH 0308

HONR378G Advanced Honors Seminar; Homeland and National Security Policy

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Jointly offered with FGSM 330. Credit granted for FGSM330 or HONR378G. Students must be in the Federal Fellows Program to register.

0101	Magdalena Bajll	Seats (Total: 20)
	M 6:00pm - 9:00pm	PLS 1117
<i>Students must be in the Federal Fellows Program to register.</i>		

HONR378J Advanced Honors Seminar; Energy and Environmental Policy

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Students must be in the Federal Fellows Program to register. Cross-listed with FGSM340. Credit granted for FGSM340 or HONR378J.

0101	Ed Fendley	Seats (Total: 20)
	Tu 3:30pm - 6:30pm	HBK 1112

HONR378K Advanced Honors Seminar; Critical Regions and International Relations

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Cross-listed with FGSM350. Credit granted for FGSM350 or HONR378K. Students must be in the Global Fellows Program to register. An examination of international relations and foreign policy challenge s in critical regions.

0101	Sean Misko, Danusia Hubah	Seats (Total: 20)
	Th 7:00pm - 10:00pm	AJC 2134

HONR378M Advanced Honors Seminar; Water Security and Global Health

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A series of seminars, often interdisciplinary in character and sometimes team-taught. The subjects will vary from semester to semester.

Restriction: Must be in Global Fellows Program; and permission of instructor.

0101	Jonathan Margolis, Winston Yu	Seats (Total: 21)
	W 3:00pm - 6:00pm	SQH 2120

HONR379**Honors Independent Study**

(Perm req)

Credits: 3 Grading Method: Regular

Involves reading or research directed by individual faculty, especially in areas outside of the student's major. Open only to University honors students.

Available only to University honors students.

Contact department for information to register for this course.

HONR379A**Honors Independent Study**

Credits: 2 Grading Method: Regular

Involves reading or research directed by individual faculty, especially in areas outside of the student's major. Open only to University honors students.

Contact department for information to register for this course.

IDEA**Academy for Innovation & Entrepreneurship****Fall 2019****IDEA101****The Carillon Studio: Creative Problem Solving and Designing Your Maryland Experience**Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in the Carillon Communities Program.

Students learn creative problem solving and collaborative strategies that will drive academic success and empower students to tackle big questions.

Restricted to students in the Carillon Communities.

0101	Brooke Smith	Seats (Total: 19)
	Meets August 26, 2019 - November 15, 2019	
	Tu 4:00pm - 5:30pm	ESJ 2101
	M 5:00pm - 5:50pm	ESJ 0202 Discussion
0102	Rachel Thompson	Seats (Total: 19)
	Meets August 26, 2019 - November 15, 2019	
	Tu 4:00pm - 5:30pm	MMH 1310A
	M 5:00pm - 5:50pm	ESJ 0202 Discussion

0103	Erica Estrada-Liou Meets August 26, 2019 - November 15, 2019 Th 4:00pm - 5:30pm M 5:00pm - 5:50pm	Seats (Total: 21) ESJ 2101 ESJ 0202 Discussion
0104	Kathleen Perry Meets August 26, 2019 - November 15, 2019 Th 4:00pm - 5:30pm M 5:00pm - 5:50pm	Seats (Total: 20) TWS 1320 ESJ 0202 Discussion
0105	Melissa Del Rios Meets August 26, 2019 - November 15, 2019 W 4:00pm - 5:30pm M 5:00pm - 5:50pm	Seats (Total: 20) ESJ 2101 ESJ 0202 Discussion
0106	Diana Forbus Meets August 26, 2019 - November 15, 2019 Tu 4:00pm - 5:30pm M 5:00pm - 5:50pm	Seats (Total: 17) MMH 1310B ESJ 0202 Discussion
0107	Kamrie Risku Meets August 26, 2019 - November 15, 2019 Tu 4:00pm - 5:30pm M 5:00pm - 5:50pm	Seats (Total: 17) BPS 1232 ESJ 0202 Discussion
0108	Amanda Baker Meets August 26, 2019 - November 15, 2019 Tu 4:00pm - 5:30pm M 5:00pm - 5:50pm	Seats (Total: 17) PLS 1158 ESJ 0202 Discussion
0109	Jordan Adams Meets August 26, 2019 - November 15, 2019 W 4:00pm - 5:30pm M 5:00pm - 5:50pm	Seats (Total: 21) ELK 1125 ESJ 0202 Discussion

0110	Stephanie Selzer	Seats (Total: 21)
	Meets August 26, 2019 - November 15, 2019	
	W 4:00pm - 5:30pm	MMH 1310B
	M 5:00pm - 5:50pm	ESJ 0202 Discussion
0111	Leslie Krafft	Seats (Total: 20)
	Meets August 26, 2019 - November 15, 2019	
	W 4:00pm - 5:30pm	CCC 1105
	M 5:00pm - 5:50pm	ESJ 0202 Discussion
0113	Lisa Kiely	Seats (Total: 21)
	Meets August 26, 2019 - November 15, 2019	
	Th 4:00pm - 5:30pm	MMH 1310A
	M 5:00pm - 5:50pm	ESJ 0202 Discussion
0115	Chetachukwu Agwoeme	Seats (Total: 20)
	Meets August 26, 2019 - November 15, 2019	
	Th 4:00pm - 5:30pm	SYM 0209
	M 5:00pm - 5:50pm	ESJ 0202 Discussion
0116	Ann Smith	Seats (Total: 17)
	Meets August 26, 2019 - November 15, 2019	
	Th 4:00pm - 5:30pm	MMH 1310B
	M 5:00pm - 5:50pm	ESJ 0202 Discussion
0117	Justin Lohr	Seats (Total: 20)
	Meets August 26, 2019 - November 15, 2019	
	Th 4:00pm - 5:30pm	JMZ 1122
	M 5:00pm - 5:50pm	ESJ 0202 Discussion
0118	Leah Howell	Seats (Total: 20)
	Meets August 26, 2019 - November 15, 2019	
	Th 4:00pm - 5:30pm	HBK 0125
	M 5:00pm - 5:50pm	ESJ 0202 Discussion

IDEA247 Introduction to Peer Innovation Coaching

(Perm req)

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Sophomore standing or higher; and permission of Academy for Innovation and Entrepreneurship. Credit only granted for: IDEA247 or IDEA250. Formerly: IDEA250. Additional information: Participation in the course requires students to submit an application, be interviewed and selected by the Academy for Innovation and Entrepreneurship.

Prepares you as an Academy for Innovation and Entrepreneurship Peer Innovation Coach (PIC), where you will be coaching and guiding student teams in the classroom as they experiment with using the design thinking process. You will first have the opportunity to sharpen your own understanding of the design thinking process by applying it to a team design challenge, as well as further explore each step through readings, discussion and reflection. You will then focus on the concept of creativity and learning about the mindsets that are conducive to innovation. Towards the end of the semester, you will focus on the theories and methods related to effective coaching. Throughout the course, you will observe and practice coaching alongside AIE Facilitators as they teach design thinking modules in various courses across campus. As you get more familiar and comfortable with the design thinking curriculum, you will have the opportunity to facilitate parts of classes or activities at some of our workshops and special events, such as departmental/campus-wide design challenges.

Contact department for information to register for this course.

IDEA258A Special Topics in Innovation; Becoming a Design Thinker: Mindsets and Tools for Innovation

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Special topics in innovation

This introductory course allows students to try on the behaviors of a creative problem-solver, leveraging the methods and tools of design thinking, a human-centered innovation process. This is a highly experiential, often experimental course. All majors are encouraged to apply.

0101	Mira Azarm	Seats (Total: 20)
	M 2:00pm - 3:15pm	ESJ 2101

IDEA258C Special Topics in Innovation; Designing Ethical Campaigns

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Special topics in innovation

This course will introduce students and immerse them in the methods of running an ethical campaign. Through our campus, local, state, and national government, we have seen how dirty politics can get. Through- out the semester students will be able to apply their learnings to design a campaign that can make tangible differences, but stay true to their core values. We will explore the different functions and methods it takes to run an ethical campaign. Our assignments and activities will allow for students to have hands on engagement with stakeholders at UMD to create and test their own ethical campaign.

0101	Mira Azarm	Seats (Total: 25)
	M 5:00pm - 6:30pm	ESJ 2101

IDEA258D

Special Topics in Innovation; Explorations in Design

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Special topics in innovation

Students are given the opportunity to apply their unique backgrounds to the realm of design. Students will engage in hands-on learning with real world applications to incorporate design thinking into everyday life. We will explore how good and bad design plays a role in the mundane, from the way we order coffee to the logos you see to the signs that help you navigate (or get lost) on the metro.

0101	Brooke Smith	Seats (Total: 25)
	W 12:30pm - 1:45pm	ESJ 2101

IDEA398

Independent Study: Experiments in Coaching

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Coach learners through projects by applying your design thinking and coaching skills in a real-world environment, which may include a class or working with a partner organization. The more effectively you can coach and support the performance of other people, and the more successful you will be. There will be regular coaching from an Academy for Innovation and Entrepreneurship team member.

Contact department for information to register for this course.

IDEA498

Independent Study: Experiments in Innovation

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Apply design thinking and/or lean startup concepts to your own real-world project, which may involve a partner organization. This course requires a high degree of self-direction in all aspects of the project including defining specific milestones and deliverables. There will be regular coaching from an Academy for Innovation and Entrepreneurship team member.

Contact department for information to register for this course.

IMMR200 Introduction to Immigration and Migration Studies

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Introduces concepts and theoretical interpretations about the causes of international migration; provides an historical overview of the main flows of immigration to the U.S.; analyzes economic, political, social, and cultural aspects that impact the immigrants' settlement process.

0101	Andres Villarreal	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	ASY 3215

IMMR219C Immigration Policy, Immigrant Lives

Credits: 3

Grading Method: Regular,
Pass-Fail, AuditGeneral Education: DSHS,
DVUP, SCIS

Cross-listed with: ANTH264. Credit only granted for: ANTH264 or IMMR219C.

An examination of the phenomenon of international migration, or immigration. Students develop awareness of how immigration has been framed in the general public and examined by social science disciplines, most prominently anthropology. Examination of case studies of different immigrant groups in distinct geographic contexts will illuminate the varied incorporation experiences of immigrants into U.S. society.

Cross-listed with ANTH264. Credit granted for ANTH264 or IMMR219C.

0101	Christina Getrich	Seats (Total: 20)
	TuTh 9:30am - 10:20am	TYD 1101
	F 9:00am - 9:50am	SQH 1103 Discussion
0102	Christina Getrich	Seats (Total: 20)
	TuTh 9:30am - 10:20am	TYD 1101
	F 10:00am - 10:50am	SQH 1103 Discussion
0103	Christina Getrich	Seats (Total: 20)
	TuTh 9:30am - 10:20am	TYD 1101
	F 11:00am - 11:50am	SQH 1103 Discussion

IMMR419J Special Topics in Immigration and Migration Studies; Globalization and the Diversifying US

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Thematic exploration of a topic in immigration or migration studies history with emphasis on understanding how the movement of people is relevant in the contemporary world.

Prerequisite: At least three credit hours of prior coursework in AMST. Cross-listed with USLT430 and AMST498W. Credit granted for USLT430, USLT498N, AMST498W, or IMMR419J.

0101	Jacqueline Partida	Seats (Total: 30)
	MWF 10:00am - 10:50am	SQH 1107

INAG Institute of Applied Agriculture Fall 2019

INAG099 Cooperative Education

(Perm req)

Credits: 0 Grading Method: Sat-Fail

Restriction: Co-op is open to sustainable agriculture and agricultural business management students who have completed a minimum of 45 credit hours, have a minimum GPA of 2.0, and have advisor's permission. Cooperative Education, the culminating 22-week field experience in your program, is a collaborative partnership between the Institute of Applied Agriculture and the employer to provide a quality academic and practical training for students. Each student's co-op will vary according to the unique career direction the student wishes to pursue and is intended to accompany seminars and activities previously acquired in the IAA program. Upon completion of the course, students will have established contacts in the industry and substantial documentation to develop a personal portfolio.

0101	Meredith Epstein	Seats (Total: 15)
	Contact instructor or department for details.	

INAG100 Introduction to Plant Science

Credits: 4 Grading Method: Regular

Restriction: Must be a student in the Institute of Applied Agriculture; or permission of AGNR-Institute of Applied Agriculture department. Credit only granted for: INAG100, PLSC100, or PLSC101.

A general introduction to plant science designed to provide the students with a working knowledge of the fundamental structures and processes of plants. Content includes plant anatomy, physiology, genetics and environmental relationships.

0101	Kenneth Ingram	Seats (Total: 15)
	MWF 8:00am - 8:50am	JUL 1123
	W 9:00am - 10:50am	JUL 1111 Lab
0102	Kenneth Ingram	Seats (Total: 15)
	MWF 8:00am - 8:50am	JUL 1123
	F 9:00am - 10:50am	JUL 1111 Lab

INAG102**Agricultural Entrepreneurship**

Credits: 3

Grading Method: Regular,
Audit

Restriction: Must be in a major in AGNR-College of Agriculture & Natural Resources; or permission of AGNR-Institute of Applied Agriculture department. Additional information: Priority in enrollment will be given to students within the Institute of Applied Agriculture. May not count toward any BMGT major or minor requirement.

This course introduces fundamental concepts related to launching a profitable agricultural business. Topics include idea generation, opportunity recognition, conducting feasibility studies, assembling the entrepreneurial team, and financing the new venture, among others. Students will learn knowledge and skills relevant to starting a new agricultural business.

0101	Temitope Fajingbesi	Seats (Total: 35)
	MWF 12:00pm - 12:50pm	JUL 1123

INAG103**Agricultural Marketing**

Credits: 3

Grading Method: Regular,
Audit

Restriction: Must be in a major in AGNR-College of Agriculture & Natural Resources; or permission of AGNR-Institute of Applied Agriculture department. Additional information: Priority in enrollment will be given to students within the Institute of Applied Agriculture. Course cannot be used to fulfill a requirement for a Robert H. Smith School of Business major or minor.

Principles of market demand are used to develop a consumer oriented market strategy for agricultural businesses. Topics include market structures, target marketing, market segmentation, niche marketing and direct marketing. Market concepts unique to agriculture products are also covered.

0101	Meredith Epstein	Seats (Total: 25)
	MWF 11:00am - 11:50am	JUL 1123

INAG106**Pesticide Use and Safety**

Credits: 2

Grading Method: Regular,
Audit

Additional information: Priority enrollment will be given to students in the IAA program or to students in the College of Agriculture and Natural Resources (AGNR).

An overview of pesticide use and safety. Topics include environmental protection, labeling, personal safety, first aid, formulation and chemistry, equipment, disposal, storage, record-keeping and liability. The course prepares students to take the Maryland State test for a private applicator's license.

0101	Ronald Myers	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

INAG110

Oral Communication

Credits: 3 Grading Method: Regular, Audit General Education: FSOC

Credit only granted for: COMM107, COMM200, INAG110, JOUR130, THET285.

A study of how perception, self-concept, and verbal and nonverbal communications affect the communication process as it emerges in the workplace. The course provides skill training in speech writing, public speaking, group communication, interpersonal communication, listening, and responding.

0101	Eric Dunning	Seats (Total: 19)
	MWF 8:00am - 8:50am	ATL 2352
0201	Amy Fisher	Seats (Total: 19)
	MWF 8:00am - 8:50am	JMP 2202
0301	Robert Ballenger	Seats (Total: 19)
	MWF 9:00am - 9:50am	CCC 1115
0401	Eric Dunning	Seats (Total: 19)
	MWF 9:00am - 9:50am	ATL 1106
0501	Amy Fisher	Seats (Total: 19)
	MWF 9:00am - 9:50am	JMP 2202
0701	Amy Fisher	Seats (Total: 19)
	MWF 10:00am - 10:50am	JMP 2202
0801	Shala Larson	Seats (Total: 19)
	MWF 10:00am - 10:50am	ATL 0201
0901	Robert Ballenger	Seats (Total: 19)
	MWF 11:00am - 11:50am	CCC 1111
1001	Chelsea Mays-Williams	Seats (Total: 19)
	MWF 11:00am - 11:50am	CHE 2140

1101	Eric Dunning MWF 11:00am - 11:50am	Seats (Total: 19) PLS 1115
1201	Shala Larson MWF 12:00pm - 12:50pm	Seats (Total: 19) JUL 1105
1301	George Kurtzweil MWF 12:00pm - 12:50pm	Seats (Total: 19) PLS 1180
1401	Chelsea Mays-Williams MWF 12:00pm - 12:50pm	Seats (Total: 19) CHE 2140
1501	George Kurtzweil MWF 1:00pm - 1:50pm	Seats (Total: 19) EGR 3114
1601	Samuel Rubin MWF 1:00pm - 1:50pm	Seats (Total: 19) ITV 1111
1701	Shala Larson MWF 1:00pm - 1:50pm	Seats (Total: 19) JUL 1105
1801	Chelsea Mays-Williams MWF 2:00pm - 2:50pm	Seats (Total: 19) CHM 0124
1901	George Kurtzweil MWF 2:00pm - 2:50pm	Seats (Total: 19) EGR 3114
2001	Samuel Rubin MWF 2:00pm - 2:50pm	Seats (Total: 19) ITV 1111
2101	JoEllen Barnhart MW 3:00pm - 4:15pm	Seats (Total: 19) JMP 1202
2201	JoEllen Barnhart M 6:00pm - 8:45pm	Seats (Total: 19) PHY 4221
2301	JoEllen Barnhart W 6:00pm - 8:45pm	Seats (Total: 19) PHY 4221
2401	Amy Fisher TuTh 8:00am - 9:15am	Seats (Total: 19) PLS 1146

2501	Eric Dunning TuTh 8:00am - 9:15am	Seats (Total: 19) EGR 3106
2601	Amy Fisher TuTh 9:30am - 10:45am	Seats (Total: 19) PLS 1172
2701	Eric Dunning TuTh 9:30am - 10:45am	Seats (Total: 19) EGR 3106
2801	Shala Larson TuTh 9:30am - 10:45am	Seats (Total: 19) JUL 1105
2901	George Kurtzweil TuTh 11:00am - 12:15pm	Seats (Total: 19) JUL 1105
3001	Chelsea Mays-Williams TuTh 11:00am - 12:15pm	Seats (Total: 19) TYD 1101
3101	Robert Ballenger TuTh 11:00am - 12:15pm	Seats (Total: 19) CHE 2116
3201	Robert Ballenger TuTh 12:30pm - 1:45pm	Seats (Total: 19) CHE 2116
3301	Chelsea Mays-Williams TuTh 12:30pm - 1:45pm	Seats (Total: 19) TYD 2110
3401	Shala Larson TuTh 12:30pm - 1:45pm	Seats (Total: 19) EGR 1110
3501	George Kurtzweil TuTh 2:00pm - 3:15pm	Seats (Total: 19) CHE 2116
3601	JoEllen Barnhart TuTh 2:00pm - 3:15pm	Seats (Total: 19) PLS 1172
3701	Samuel Rubin TuTh 2:00pm - 3:15pm	Seats (Total: 19) PLS 1176
3801	Samuel Rubin TuTh 3:30pm - 4:45pm	Seats (Total: 19) PLS 1176

3901	JoEllen Barnhart	Seats (Total: 19)
	TuTh 3:30pm - 4:45pm	CHE 2116
4001	Samuel Rubin	Seats (Total: 19)
	TuTh 5:00pm - 6:15pm	PLS 1176

INAG110S Oral Communication

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: FSOC

Credit only granted for: COMM107, COMM200, INAG110, JOUR130, THET285.

A study of how perception, self-concept, and verbal and nonverbal communications affect the communication process as it emerges in the workplace. The course provides skill training in speech writing, public speaking, group communication, interpersonal communication, listening, and responding.

Restricted to College Park Scholars.

0601	Robert Ballenger	Seats (Total: 19)
	MWF 10:00am - 10:50am	CCC 1111

INAG123 People, Planet, and Profit: Digging Into Sustainable Agriculture

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSSP,
SCIS

Investigates the principles and practices of sustainable agriculture and their relationship to the greater food system. Explores the social (people), environmental (planet), and economic (profit) impacts of agriculture - from challenges to opportunities. INAG123 applies the principles of sustainability to various agricultural production practices and systems - at a range of different scales - to see what lessons these varied models can offer. Along the way, we will consider domestic issues such as food safety and distribution, food justice, cultural relevance, biodiversity, farming communities, and effects on local economies.

0101	Meredith Epstein	Seats (Total: 25)
	W 3:00pm - 6:00pm	JUL 1123

INAG199 Special Problems

Credits: 1-3 Grading Method: Regular

Restricted to students in the AGNR-Institute of Applied Agriculture department. Others by permission of the AGNR-Institute of Applied Agriculture department. A detailed study, including a written report, involving a current issue in an agricultural area that relates to the student's major. The study is conducted under the direction of a faculty member. A maximum of three credit hours of special problems may be applied toward graduation.

0101	Geoffrey Rinehart	Seats (Total: 10)
	Contact instructor or department for details.	
0201	Meredith Epstein	Seats (Total: 10)
	Contact instructor or department for details.	
0301	Kenneth Ingram	Seats (Total: 10)
	Contact instructor or department for details.	
0401	Roy Walls	Seats (Total: 10)
	Contact instructor or department for details.	
0501	Temitope Fajingbesi	Seats (Total: 10)
	Contact instructor or department for details.	
0601	Glori Hyman	Seats (Total: 10)
	Contact instructor or department for details.	

INAG199C

(Perm req)

Special Problems; Special Problems in AgriScience

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Students must successfully complete an accredited high school agriculture program with a minimum of 4 agriculture courses with a minimum grade of B in each course. Demonstrates the application of scientific principles of agriculture by developing and presenting an oral report on a capstone project relevant to current agriculture issues.

0101	Glori Hyman	Seats (Total: 10)
	Contact instructor or department for details.	

INAG199D

Special Problems; Agricultural Tractor Operations and Maintenance

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

This class introduces students to the operation and maintenance of agricultural tractors and farm equipment. Students learn to safely and efficiently operate tractors, connect and use implements, perform regular maintenance, and handle materials. This course will be held at the Upper Marlboro Research and Education Center on two consecutive days: Saturday, Sept. 21 and Sunday, Sept. 22, 2019 9am-5pm. (Rain date is set for October 5 and October 6). Students will need to provide their own transportation to and from the facility. Restriction: IAA students are given priority. Other UMD students will be granted permission to enroll if seats are available.

0101	Jeff Semler	Seats (Total: 12)
	Contact instructor or department for details.	

INAG201 Agricultural Human Resources Management

Credits: 3 Grading Method: Regular

Restriction: Must be in a major in AGNR-College of Agriculture & Natural Resources; or permission of AGNR-Institute of Applied Agriculture department. Additional information: May not count toward any BMGT major or minor requirement.

The course introduces students to the study and application of the basic principles of human relations and personnel management. A variety of approaches to recruiting, training, delegating, motivating, and appraising employees are among the topics discussed.

0101	Kenneth Ingram	Seats (Total: 30)
	TuTh 9:30am - 10:45am	JUL 1123

INAG203 Agricultural Finance

Credits: 3 Grading Method: Regular,
Audit

Restriction: Students at the Institute of Applied Agriculture (IAA); or students at the College of Agriculture and Natural Resources (AGNR); or permission may be granted to other students based on available space. Additional information: Course cannot be used to fulfill a requirement for a Robert H. Smith School of Business major or minor.

This course introduces fundamental concepts related to the financial management of an agricultural business. Topics include financial statement analysis, financial planning, the relationship between risk and return, the time value of money, costs associated with borrowed funds, sources of capital, financial markets and intermediaries in agriculture, and personal finance, among others. Students will gain financial knowledge and skills necessary for managing a profitable agricultural business.

0101	Temitope Fajingbesi	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	JUL 1123

Diseases of Ornamentals and Turf

Recommended: Completion of one of the following is recommended: PLSC 253, PLSC 254, INAG 107, PLSC 305. Additional information: Priority in enrollment will be given to students within the Institute of Applied Agriculture.

The course will cover various topics such as plant pathology, disease control practices, and an in depth coverage of the major diseases of ornamentals and turfgrasses in the Mid-Atlantic region. Emphasis will be placed on identification of disease signs and symptoms. Over 50 diseases will be covered during the semester.

0101	Geoffrey Rinehart	Seats (Total: 25)	
	TuTh 12:30pm - 1:20pm	JUL 1111	
	Th 1:30pm - 3:30pm	JUL 1111	Lab

Insects of Ornamentals and Turf

Recommended: PLSC253, PLSC254, or PLSC305; or INAG107. Restriction: Must be in a major in AGNR-College of Agriculture & Natural Resources; or permission of AGNR-Institute of Applied Agriculture department. Additional information: Priority enrollment will be given to students in the IAA program.

A study of the major insect pests and beneficial insects of ornamental plants and turfgrasses in the Mid-Atlantic region. The student will be responsible for insect identification, life history, and control practices of approximately 100 insects. An insect collection consisting of both insect pests and beneficial insects is required.

0101	Geoffrey Rinehart	Seats (Total: 18)	
	WF 10:00am - 10:50am	JUL 1123	
	M 9:00am - 10:50am	JUL 1111	Lab

Surveying and GPS Applications in Agriculture

Restriction: Must be in a major in AGNR-College of Agriculture & Natural Resources; or permission of AGNR-College of Agriculture & Natural Resources. Additional information: Course is open to Institute of Applied Agriculture students and permission will be granted to others in the College of Agriculture and Natural Resources based on available seats. IAA student must have completed INAG 101 and INAG 104.

The principles of land measurement, using conventional surveying techniques to determine distance, elevation change or topography; Global Positioning System (GPS) devices; and mapping, utilizing Graphical Information Systems (GIS), will be the focus of this course. Students will use surveying equipment and GPS receivers and other data collection instruments to collect land data features. Data will be mapped and analyzed using software including: Trimble GPS Pathfinder Office, and ESRI ArcGIS software. Students will download and integrate available on-line geo-referenced map images or other data to support the development of their GPS collected data. Spatial analysis software will be used to map problem areas of field agronomic factors.

0101	Roy Walls	Seats (Total: 10)	
	W 12:00pm - 1:50pm	ANS 0509	
	F 12:00pm - 1:50pm	ANS 0509	Lab

INAG240

Professional Development

Credits: 1 Grading Method: Regular

Prerequisite or corequisite: INAG299A. Restricted to students in the AGNR-Institute of Applied Agriculture department. Others by permission of the AGNR-Institute of Applied Agriculture department. Required for all graduating IAA students, this course provides students with the opportunity to reflect on their academic experience and develop skills necessary to successfully transition into their careers. Students will explore careers and professional associations, complete their portfolios, and prepare resumes. Each student will develop and present a professional presentation on his/her internship experience.

0101	Glori Hyman	Seats (Total: 25)	
	M 3:00pm - 4:50pm	JUL 1123	

INAG242

Golf Course Design and Construction

Credits: 3 Grading Method: Regular General Education: DSSP

An appreciation and understanding of the game of golf is obtained through lectures on the history, organizations, and rules of the game. Golf course design theories, great architects and their courses, and construction specifications are discussed. Students will complete two golf course design projects.

0101	Kenneth Ingram	Seats (Total: 25)	
	MW 2:00pm - 2:50pm	JUL 1123	
	W 3:00pm - 4:50pm	JUL 1111	Lab

INAG250

Fundamentals of Agricultural Mechanics

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A comprehensive course that teaches the fundamentals of agricultural related mechanics. Lecture and lab exercises will cover the broad range of topics associated with agricultural mechanics including electricity, plumbing, welding processes, and wood and metal working applications. Emphasis will be given to the design and installation of electrical circuits. It will also include project planning and implementation including development of safety protocols for each area of study and introduction of GPS equipment and software for survey data collection.

0101	Roy Walls	Seats (Total: 8)
	TuTh 9:30am - 12:20pm	ANS 0504
0201	Roy Walls	Seats (Total: 8)
	TuTh 2:00pm - 4:50pm	ANS 0504

INEM600 Information Environments

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies.

An exploration of various models and methodologies used to capture and deploy internal and external information and knowledge in a number of settings; organizational analysis in terms of information creation, flow, sharing, conservation, and application to problem solving; internal and external influences on the management of information and knowledge; various information flows; information management in a variety of settings.

0102	Ping Wang	Seats (Total: 30)
	Th 6:00pm - 8:45pm	BPS 0283

INFM603 Information Technology and Organizational Context

Credits: 3 Grading Method: Regular, Audit

Restriction: Must not have completed LBSC671 or LBSC690; and permission of INFO-College of Information Studies.

Application of communication and information technologies to support work processes, including technology-enhanced communication networks, computer-supported collaborative work, decision-support systems, interactive systems, and systems analysis. Acquisition of information systems and their integration into the organization.

0101	Paul Jacobs	Seats (Total: 30)
	W 6:00pm - 8:45pm	ESJ 1309

INEM605 Users and Use Context

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of INFO-College of Information Studies.

Use of information by individuals. Nature of information. Information behavior and mental models. Characteristics of problems, task analysis, problem solving, and decision making. Methods for determining information behavior and user needs. Information access. Information technology as a tool in information use.

0101	Vera Rhoads	Seats (Total: 30)
	Tu 6:00pm - 8:45pm	CSI 3118

INFM612 Management Concepts and Principles for Information Professionals

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of INFO-College of Information Studies.

Key aspects of management - focusing on planning, organizing, leading and controlling. The evolution of management, innovative management for the changing world, management styles and leadership, managerial planning, goal setting and decision making. Ethical issues, designing adaptive organizations responding to change, global environment, diversity, and utilizing the appropriate technology to provide effective management of information programs and services.

ML01	Taverekere Srikantaiah	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

INFM719 Independent Study

Credits: 1-3 Grading Method: Regular

Intensive individual study under faculty supervision.

Contact department for information to register for this course.

INFM737 Information Management Capstone Experience

Credits: 3 Grading Method: Sat-Fail

Prerequisite: INFM736; and must have earned a minimum of 27 credits in the MIM Program. Or permission of instructor. Restriction: Must be in Information Management (Master's) program; and permission of INFO-College of Information Studies.

The Information Management Capstone Experience I and II are the culminating experience of the Master of Information Management program, taken in the students final two semesters. The capstone experience provide students with the opportunity to integrate and synthesize the knowledge and skills acquired throughout their MIM course work while working in a real world Information Management project. These courses must be taken in succession.

0101	David Loshin	Seats (Total: 40)
	Th 2:00pm - 4:45pm	CHE 2118

INFM757 Organizational and Business Process Modeling

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have completed at least 9 credits in the College of Information Studies; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INFM718V OR INFM757. Formerly: INFM718V.

General principles of modeling, including methods for modeling organizational and business process for information applications and strategy development. Approaches to evaluating models based on their accuracy and usefulness.

0101	Vedat Diker	Seats (Total: 30)
	Tu 6:00pm - 8:45pm	JMP 2202

INFM799

Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Intensive individual research course under the supervision of a faculty member.

Contact department for information to register for this course.

INST

Information Studies

Fall 2019

INST126

Introduction to Programming for Information Science

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Minimum grade of C- in MATH115; or must have math eligibility of MATH140 or higher; or permission of instructor. Restriction: Must not have completed INST326; and must be in Information Science program.

An introduction to computer programming for students with very limited or no previous programming experience. Topics include fundamental programming concepts such as variables, data types, assignments, arrays, conditionals, loops, functions, and I/O operations.

0101	Edward Summers	Seats (Total: 50)
	MWF 2:00pm - 2:50pm	ATL 1113
0102	Jean-Paul Togbe	Seats (Total: 60)
	TuTh 9:30am - 10:45am	TYD 2106
0103	Aric Bills	Seats (Total: 50)
	TuTh 3:30pm - 4:45pm	ARC 1101
0104	Amanda Lazar	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

INST152

"Fake Checking": Battling Misinformation and Disinformation in the Real World

Credits: 3 Grading Method: Regular,
Pass-Fail

General Education: DSSP

Examining the phenomenon of "fake news" using the principles of information literacy, students will develop their skills in locating, analyzing, and evaluating different information sources -- in the classroom, in their personal lives, and in the workplace.

0103	Ursula Gorham-Oscilowski	Seats (Total: 150)
	TuTh 11:00am - 12:15pm	ARM 0126

INST154

Apollo at 50

Credits: 3 Grading Method: Regular, General Education: DSHS,
Audit SCIS

Examines Apollo mission, one of the greatest engineering accomplishments of all time, in which Neil Armstrong walked on the moon. Since the mission, people have asked: if we can land on the moon, why can't we eliminate poverty? Why can't we cure cancer? Why can't we prevent global warming? Asks what were the social, political, financial, scientific, engineering, operational, and human aspects of the Apollo program that came together to make the moon landings possible?

0101	Douglas Oard	Seats (Total: 78)
	TuTh 5:00pm - 6:15pm	ESJ 2212

INST201

Introduction to Information Science

Credits: 3 Grading Method: Regular, General Education: DSHS
Audit

Credit only granted for: INST201 or INST301. Formerly: INST301.

Examining the effects of new information technologies on how we conduct business, interact with friends, and go through our daily lives. Understanding how technical and social factors have influenced the evolution of information society. Evaluating the transformative power of information in education, policy, and entertainment, and the dark side of these changes.

0101	Sarah Gilbert	Seats (Total: 100)
	TuTh 12:30pm - 1:45pm	SQH 1120
0102	Lee Lipscomb	Seats (Total: 100)
	M 10:00am - 10:50am	SQH 1120
	Class time/details on ELMs	ONLINE
0103	Laria Rogers	Seats (Total: 100)
	TuTh 3:30pm - 4:45pm	TYD 0117

0105	Ryan O'Grady	Seats (Total: 50)
	Class time/details on ELMs	ONLINE
FC01	Sydney Triola	Seats (Total: 20)
	TuTh 7:30pm - 8:45pm	ATL 2416
	<i>Restricted to students in Freshman Connection.</i>	

INST301

Introduction to Information Science

Credits: 3 Grading Method: Regular, Audit General Education: DSHS

Restriction: Must be in Information Science program; and restricted to students in the Information Science Program on the Universities at Shady Grove campus. Credit only granted for: INST201 or INST301.

Examining the effects of new information technologies on how we conduct business, interact with friends, and go through our daily lives. Understanding how technical and social factors have influenced the evolution of information society. Evaluating the transformative power of information in education, policy, and entertainment, and the dark side of these changes.

ESG1	Ryan O'Grady	Seats (Total: 40)
	Class time/details on ELMs	ONLINE
	<i>Restricted to students in the BSIS @ USG Program.</i>	

INST309

Independent Study in Information Science

(Perm req)

Credits: 1-3 Grading Method: Regular

Individual independent study of an aspect of information science, selected according to student interest and need in consultation with a member of the iSchool faculty. Repeatable to 6 credits if content differs.

Contact department for information to register for this course.

INST311

Information Organization

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); or must be concurrently enrolled in INST201 or INST301. Restriction: Must be in Information Science program.

Examines the theories, concepts, and principles of information, information representation and organization, record structures, description, and classification. Topics to be covered in this course include the methods and strategies to develop systems for storage, organization, and retrieval of information in a variety of organizational and institutional settings, as well as policy, ethical, and social implications of these systems.

0101	Kelly Hoffman TuTh 11:00am - 12:15pm	Seats (Total: 50) HBK 0115
0102	Katy Lawley MWF 2:00pm - 2:50pm	Seats (Total: 45) SPH 0302
0103	Katy Lawley MWF 3:00pm - 3:50pm	Seats (Total: 45) PHY 1201
0104	Chad Doran Class time/details on ELMs	Seats (Total: 45) ONLINE
ESG1	Chad Doran TuTh 8:00am - 9:15am <i>Restricted to students in the BSIS @ USG Program.</i>	Seats (Total: 40) BLD3 3220

INST314

Statistics for Information Science

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have completed or be concurrently enrolled in INST201; or must have completed or be concurrently enrolled in INST301. And minimum grade of C- in INST201 and INST301; and MATH115; and STAT100; and minimum grade of C- in MATH115 and STAT100. Restriction: Must be in Information Science program; or permission of INFO-College of Information Studies. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Basic concepts in statistics including measure construction, data exploration, hypothesis development, hypothesis testing, pattern identification, and statistical analysis. The course also provides an overview of commonly used data manipulation and analytic tools. Through homework assignments, projects, and in-class activities, you will practice working with these techniques and tools to create information resources that can be used in individual and organizational decision-making and problem-solving.

0101	Yla Tausczik TuTh 3:30pm - 4:45pm	Seats (Total: 45) KEY 0126
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0103	Adrienne Bradford TuTh 12:30pm - 1:45pm	Seats (Total: 50) TYD 1132
0104	Mark Frame Class time/details on ELMs	Seats (Total: 50) ONLINE
0105	Abdirisak Mohamed Class time/details on ELMs	Seats (Total: 50) ONLINE
ESG1	Lori Perine TuTh 9:45am - 11:00am <i>Restricted to students in the BSIS @ USG Program.</i>	Seats (Total: 40) BLD3 4226

INST326

Object-Oriented Programming for Information Science

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Minimum grade of C- in INST126. And 1 course with a minimum grade of C- from (INST201, INST301); or must be concurrently enrolled in INST201 or INST301. Restriction: Must be in Information Science program.

An introduction to programming, emphasizing understanding and implementation of applications using object-oriented techniques. Topics to be covered include program design and testing as well as implementation of programs.

Students who wish to register should contact the College of Information Studies.

0101	Aric Bills MW 9:30am - 10:45am	Seats (Total: 50) KEY 0103
0103	Joshua Westgard MWF 1:00pm - 1:50pm	Seats (Total: 50) HBK 0115
0104	Nekabari Sigalo TuTh 9:30am - 10:45am	Seats (Total: 50) PHY 1204
ESG1	Jeannette Kartchner W 8:00am - 10:45am <i>Restricted to students in the BSIS @ USG Program.</i>	Seats (Total: 40) BLD3 3226

INST327

Database Design and Modeling

Credits: 3 Grading Method: Regular,
Audit

General Education: DSSP

Prerequisite: Minimum grade of C- in INST126. And 1 course with a minimum grade of C- from (INST201, INST301); or must be concurrently enrolled in INST201 or INST301. Restriction: Must be in Information Science program. Credit only granted for: INST327 or BMGT402.

Introduction to databases, the relational model, entity-relationship diagrams, user-oriented database design and normalization, and Structured Query Language (SQL). Through labs, tests, and a project, students develop both theoretical and practical knowledge of relational database systems.

Students who wish to register should contact the College of Information Studies.

0101	Pamela Duffy TuTh 2:00pm - 3:15pm	Seats (Total: 50) PHY 4221
0102	Pamela Duffy MWF 10:00am - 10:50am	Seats (Total: 50) HBK 0302H
0103	Pamela Duffy MWF 1:00pm - 1:50pm	Seats (Total: 50) HBK 0302H
0104	Nima Asadi TuTh 5:00pm - 6:15pm	Seats (Total: 50) HBK 0115

INST335 Organizations, Management and Teamwork

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in PSYC100. Restriction: Must be in Information Science program.

Examines principles, methods and types of leadership with an emphasis on goal setting, motivation, problem solving, and conflict resolution. Examines principles of developing teams and managing team projects through planning and execution, including estimating costs, managing risks, scheduling, staff and resource allocation, communication, tracking, and control. Trains students to recognize and capitalize on opportunities to use information to increase efficiency, improve performance, and support innovation within teams and organizations. Focuses on strategic use of emerging technologies and new information resources to execute information-enabled change.

Students who wish to register should contact the College of Information Studies.

0101	Philip Piety TuTh 2:00pm - 3:15pm	Seats (Total: 50) ARC 1103
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0102	Susannah Paletz	Seats (Total: 50)
	MW 11:00am - 12:15pm	PHY 1204
0104	Philip Piety	Seats (Total: 50)
	TuTh 11:00am - 12:15pm	SQH 1120
ESG1	Ping Wang	Seats (Total: 40)
	F 9:00am - 11:45am	BLD3 4220
<i>Restricted to students in the BSIS @ USG Program.</i>		

INST341 Introduction to Digital Curation

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: Minimum grade of C- in INST126, INST201, INST311, STAT100, MATH115, and PSYC100. Restriction: Must be in Information Science program.

Explores various dimensions and contexts for digital curation, which includes all activities involving the management, representation and preservation of both born-digital and digitized information. Focuses on opportunities, challenges and demands of every-increasing digital data and networked information infrastructure.

0101	Katrina Fenlon	Seats (Total: 48)
	TuTh 3:30pm - 4:45pm	ITV 1100

INST346 Technologies, Infrastructure and Architecture

(Perm req)

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and 1 course with a minimum grade of C- from (INST326, CMSC131); and minimum grade of C- in INST327. Restriction: Must be in Information Science program. Credit only granted for: INST346 or BMGT405.

Examines the basic concepts of computer hardware, systems software, networking, client/server architectures, cloud computing, distributed systems, and high performance computing as applied to information rich domains. Technology and architectures will be discussed within the contexts of solving social issues, supportingscience, and conducting business operations. Current computing topics such as web environments, IoT, security, management, and policy will also be reviewed.

Students who wish to register should contact the College of Information Studies.

0101	Donal Heidenblad	Seats (Total: 50)
	TuTh 3:30pm - 4:45pm	CSI 1122

0102	Dennis Frezzo Class time/details on ELMs	Seats (Total: 50) ONLINE
0103	Donal Heidenblad TuTh 12:30pm - 1:45pm	Seats (Total: 50) TYD 1102
0104	Utkarsh Dwivedi, Donal Heidenblad TuTh 9:30am - 10:45am	Seats (Total: 45) HBK 0103
ESG1	Dennis Frezzo Class time/details on ELMs <i>Restricted to students in the BSIS @ USG Program.</i>	Seats (Total: 50) ONLINE

INST352 Information User Needs and Assessment

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST311. Restriction: Must be in Information Science program; and permission of INFO-College of Information Studies.

Focuses on use of information by individuals, including the theories, concepts, and principles of information, information behavior and mental models. Methods for determining information behavior and user needs, including accessibility issues will be examined and strategies for using information technology to support individual users and their specific needs will be explored.

Students who wish to register should contact the College of Information Studies.

0101	Kathy Weaver TuTh 11:00am - 12:15pm	Seats (Total: 50) PHY 4221
0102	Rachel Gammons Class time/details on ELMs	Seats (Total: 50) ONLINE
0103	Wayne Lutters TuTh 2:00pm - 3:15pm	Seats (Total: 50) PLS 1140
0105	Rachael Bradley-Montgomery Class time/details on ELMs	Seats (Total: 50) ONLINE

INST354 Decision-Making for Information Science

Credits: 3 Grading Method: Regular, Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST314, MATH115, STAT100, and PSYC100. Restriction: Must be in Information Science program.

Examines the use of information in organizational and individual decision-making, including the roles of information professionals and information systems in informed decision-making through techniques such as data analysis and regression, optimization, sensitivity analysis, decision trees, risk analysis and business simulation models.

Students who wish to register should contact the College of Information Studies.

0101	Kathy Weaver TuTh 2:00pm - 3:15pm	Seats (Total: 38) SQH 1119
0102	Christopher Antoun Class time/details on ELMs	Seats (Total: 50) ONLINE
0105	Vikas Sahasrabudhe Class time/details on ELMs	Seats (Total: 50) ONLINE

INST362

User-Centered Design

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST326; and minimum grade of C- in PSYC100. Restriction: Must be in Information Science program.

Introduction to human-computer interaction (HCI), with a focus on how HCI connects psychology, information systems, computer science, and human factors. User-centered design and user interface implementation methods discussed include identifying user needs, understanding user behaviors, envisioning interfaces, and utilizing prototyping tools, with an emphasis on incorporating people in the design process from initial field observations to summative usability testing.

Students who wish to register should contact the College of Information Studies.

0101	Rachael Bradley-Montgomery	Seats (Total: 90)
	Class time/details on ELMs	ONLINE
0102	Ge Gao	Seats (Total: 50)
	TuTh 9:30am - 10:45am	PHY 4221

0103	Elizabeth Bonsignore TuTh 2:00pm - 3:15pm	Seats (Total: 50) HBK 0302H
0104	David Weintrop TuTh 11:00am - 12:15pm	Seats (Total: 45) HBK 0302H

INST364
Human-Centered Cybersecurity

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST327, STAT100, MATH115, and PSYC100. Restriction: Must be in Information Science program.

Cybersecurity is fundamentally a problem of human interaction with technology, but its technical challenges are better understood than its human challenges. This course is designed to give you an overview of human interactions with cybersecurity technology, from users to system designers. Using the information gleaned in this course, you should be able to make better predictions about how people react to cybersecurity policies and tools, and how those reactions shape organizational behavior. The earlier part of the course focuses on explanations for behavior, while the later parts of the course focus more on the development and evaluation of tools for assisting people in cybersecurity.

0101	Susan Campbell TuTh 3:30pm - 4:45pm	Seats (Total: 40) ATL 1113
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INST377
Dynamic Web Applications

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST327, STAT100, MATH115, and PSYC100. Restriction: Must be in Information Science program. Credit only granted for: INST377 or BMGT406.

An exploration of the basic methods and tools for developing dynamic, database-driven websites, including acquiring, installing, and running web servers, database servers, and connectability applications.

Students who wish to register should contact the College of Information Studies.

0101	Alex Leitch MWF 11:00am - 11:50am	Seats (Total: 50) HBK 0302H
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0102	Alex Leitch	Seats (Total: 50)
	TuTh 12:30pm - 1:45pm	HBK 0302H
0103	Alex Leitch	Seats (Total: 50)
	TuTh 9:30am - 10:45am	HBK 0302H
ESG1	David Nguyen	Seats (Total: 40)
	Sa 9:00am - 11:45am	BLD3 2226
<i>Restricted to students in the BSIS @ USG Program.</i>		

INST408A Special Topics in Information Science; Consumer Health Informatics

Credits: 3 Grading Method: Regular,
 Audit

Selected topics in information science.

Prerequisite: INST201.

0101	Beth St Jean, Fiona Jardine	Seats (Total: 40)
	M 2:00pm - 4:45pm	HBK 0302H

INST408B Special Topics in Information Science; Introduction to Health Informatics

Credits: 3 Grading Method: Regular,
 Audit

Selected topics in information science.

Prerequisite: INST201.

0101	Nancy Roderer	Seats (Total: 40)
	Th 2:00pm - 4:45pm	AJC 2132

INST408C Special Topics in Information Science; Ethical Hacking

Credits: 3 Grading Method: Regular,
 Audit

Selected topics in information science.

Prerequisite: INST201.

0101	Susan Campbell, Behnam Shariati	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

INST408G**Special Topics in Information Science; Big Data Analysis and Visualization**

Credits: 3

Grading Method: Regular,
Audit*Selected topics in information science.*

ESG1	Ian Page	Seats (Total: 40)
	Th 9:00am - 11:45am	BLD3 4220
<i>Restricted to students in the BSIS @ USG Program.</i>		

INST408I**Special Topics in Information Science; Computational Journalism**

(Perm req)

Credits: 3

Grading Method: Regular,
Audit*Selected topics in information science.*

Cross-listed with JOUR479V and JOUR779V. Credit only granted for JOUR479V, JOUR779V, or INST408I.

0101	Naeemul Hassan	Seats (Total: 8)
	M 10:00am - 12:45pm	KNI 2103

INST414**Data Science Techniques**

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST314, STAT100, MATH115, and PSYC100. Restriction: Must be in Information Science program.

An exploration of how to extract insights from large-scale datasets. The course will cover the complete analytical funnel from data extraction and cleaning to data analysis and insights interpretation and visualization. The data analysis component will focus on techniques in both supervised and unsupervised learning to extract information from datasets. Topics will include clustering, classification, and regression techniques. Through homework assignments, a project, exams and in-class activities, students will practice working with these techniques and tools to extract relevant information from structured and unstructured data.

0101	Jennifer Proctor	Seats (Total: 50)
	Th 11:00am - 12:15pm	EGR 0108
	Class time/details on ELMs	ONLINE

0102	Aditya Ravindra Bhat	Seats (Total: 50)
	MW 5:30pm - 6:45pm	ATL 2428

INST447

Data Sources and Manipulation

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST327, STAT100, MATH115, and PSYC100; and 1 course with a minimum grade of C- from (INST326, CMSC131). Restriction: Must be in Information Science program.

Examines approaches to locating, acquiring, manipulating, and disseminating data. Imperfection, biases, and other problems in data are examined, and methods for identifying and correcting such problems are introduced. The course covers other topics such as automated collection of large data sets, and extracting, transforming, and reformatting a variety of data and file types.

0101	Yla Tausczik	Seats (Total: 50)
	TuTh 12:30pm - 1:45pm	VMH 1203
0102	Donal Heidenblad, William Bowser	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

INST462

Introduction to Data Visualization

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST314, MATH115, PSYC100, and STAT100. Restriction: Must be in Information Science program.

Exploration of the theories, methods, and techniques of visualization of information, including the effects of human perception, the aesthetics of information design, the mechanics of visual display, and the semiotics of iconography.

Students who wish to register should contact the College of Information Studies.

0102	Eric Newburger	Seats (Total: 40)
	TuTh 9:30am - 10:45am	PHY 0405
0103	Jennifer Golbeck	Seats (Total: 100)
	Class time/details on ELMs	ONLINE

INST466**Technology, Culture, and Society**

Credits: 3 Grading Method: Regular,
Audit

General Education: DVCC

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301). Restriction: Permission of INFO-College of Information Studies.

Individual, cultural, and societal outcomes associated with development of information & communication technologies (ICTs), including pro- and anti-social factors. Unpacking how gender, race, ethnicity, sexual orientation, disabilities, and political affiliations affect consumption and production of online experiences. Unpacking how structures of dominance, power and privilege manifest at individual, institutional and cultural levels.

0101	Daniel Greene TuTh 11:00am - 12:15pm	Seats (Total: 40) SQH 1101
0102	Daniel Greene TuTh 2:00pm - 3:15pm	Seats (Total: 50) IRB 1116
0103	Nicol Lee Class time/details on ELMs	Seats (Total: 50) ONLINE

INST490**Integrated Capstone for Information Science**

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST126, INST311, INST314, INST326, INST327, INST335, INST346, INST352, INST362, PSYC100, STAT100, and MATH115. Restriction: Must be in Information Science program; and permission of INFO-College of Information Studies.

The capstone provides a platform for Information Science students where they can apply a subset of the concepts, methods, and tools they learn as part of the Information Science program to addressing an information problem or fulfilling an information need.

0102	Timothy Rainsford TuTh 12:30pm - 1:45pm	Seats (Total: 40) KEY 0103
0103	Richard Panzer Tu 6:00pm - 8:45pm	Seats (Total: 40) KEY 0103
0104	Andrew Fellows W 2:00pm - 4:45pm	Seats (Total: 40) SKN 0104

Introduction to Archives and Digital Curation

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC604 or LBSC605.

Overview of the principles, practices, and applications in the archival and digital curation fields.

0201	Ricardo Punzalan	Seats (Total: 30)
	Tu 6:00pm - 8:45pm	HBK 0302J

Government Information

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INFM718E, INST607, or LBSC708E. Formerly: INFM718E and LBSC708E.

An introduction to the nature and scope of government information. Tracing the ongoing efforts of government agencies to offer information, services, and resources online, this course examines the nature, current impacts, and future impacts of E-government. More specifically, the course explores information and communication technologies designed to make government more open and transparent; the design, implementation, and evaluation of efficient, effective, and new government and governance mechanisms; the role of information institutions in supporting E-government; and the development and implementation of selected public facing E-government tools (e.g., portals, visualizations).

ML01	Ursula Gorham-Oscilowski	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

Information Ethics

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INFM718Q, INST610, or LBSC708I. Formerly: INFM718Q and LBSC708I.

Investigation of the diverse range of ethical challenges facing society in the information age. Ethical theories, including non-Western and feminist theories. Application of theories to information ethics issues.

ML01	Ana Ndumu	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

INST613 Information and Human Rights

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Permission of INFO-College of Information Studies.

An examination of information as a human right, including topics: social, cultural, economic, legal, and political forces shaping information rights; the impact of information rights on information professions, standards, and cultural institutions; and information rights and disadvantaged populations.

0101	Paul Jaeger	Seats (Total: 30)
	M 6:00pm - 8:45pm	HBK 0105

INST615 Information Professionals and the Law

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC735 OR INST615. Formerly: LBSC735.

An exploration of the interrelated issues of the provision of and information literacy about legal information by information organizations and the impacts of legal issues, such as privacy and filtering, on the practice of information organizations that serve the public.

ML01	Ursula Gorham-Oscilowski	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

INST620 Diverse Populations, Inclusion, and Information

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC620 OR INST620. Formerly: LBSC620.

Importance of equality of information access. Social, political, and technological barriers to information. Information needs of diverse and underrepresented populations. Principles of inclusive information services.

ML01	Renee Hill	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

INST622 Information and Universal Usability

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC622 OR INST622. Formerly: LBSC622.

Information services and technologies to provide equal experiences and outcomes to all users. Laws, standards, approaches, component concepts, access needs, and technologies in relation to physical and online information environments.

0101	Jonathan Lazar	Seats (Total: 30)
	Th 2:00pm - 4:45pm	EGR 1104

INST627 Data Analytics for Information Professionals

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of INFO-College of Information Studies.

Skills and knowledge needed to craft datasets, perform quantitative and qualitative analyses, and develop information resources that bridge the gap between raw data and decision makers' needs.

0201	Jennifer Golbeck	Seats (Total: 30)
	W 2:00pm - 4:45pm	HBK 0105

INST630 Introduction to Programming for the Information Professional

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of INFO-College of Information Studies.

An introduction to computer programming intended for students with no previous programming experience. Topics include fundamentals of programming and current trends in user interface implementation that are relevant to information professionals.

0101	David Patrick	Seats (Total: 38)
	M 6:00pm - 8:45pm	HBK 0115

INST631 **Fundamentals of Human-Computer Interaction**

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have completed or be concurrently enrolled in INST630; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST631 or LBSC795. Formerly: LBSC795.

Principles of human-human and machine-machine communication as a basis for models of human-computer communication. Issues related in input/ output devices, conceptual models, levels of control, metaphor and personification, adaptability, and intensionality/extensionality.

0101	Jonathan Lazar	Seats (Total: 40)
	Tu 6:00pm - 8:45pm	BPS 1238

INST638

HCI Professional Preparation Seminar

Credits: 1 Grading Method: Sat-Fail,
 Audit

The human-computer interaction area is huge and diverse, yet all HCI professionals will face a common set of challenges upon embarking into their future careers, including job hunting, interviewing, joining a team, managing group dynamics, and staying abreast of current technology. Students will learn how to tackle these challenges from a series of speakers familiar with current industry practice.

Class will meet in person on select Mondays to be announced later. The human-computer interaction (HCI) field is diverse and growing, yet all HCI professionals will face a common set of challenges as they start their careers, including portfolio preparation, job hunting, interviewing, joining a team, managing group dynamics, and staying abreast of current technology. This blended course helps student tackle these challenges, with speakers familiar with current industry practice, via in-person Tech Talks and online activities.

0101	Bill Kules	Seats (Total: 10)
	M 5:00pm - 5:50pm	HBK 0302J
	Class time/details on ELMs	ONLINE

INST639A

Practical Skills in HCI; Portfolio Development Workshop

Credits: 1 Grading Method: Sat-Fail,
 Audit

Current industry practice in the HCI and UX field involves being familiar with many practical skills and specialized software. In this repeatable course, HCIM students will be able to acquire some of these vital practical skills in order to be better prepared for joining industry upon graduation. Furthermore, this will also be an opportunity for students to develop their portfolio for future job hunts. Offered in both Fall and Spring semesters, the intention is for these "practical skills" to be taught by professional instructors with expert knowledge. The content of the course will vary from semester to semester, but here is a sample of topics: Graphic and visual design and communication; UX design and research in games; Voice and gestures; UX mockups and wireframing tools; Practical web design and technologies; UX project management software.

Students will learn how to create a live, easy-to-update public portfolio to showcase their individual strengths as a UX professional and shape their personal marketing to reach specific goals. Craft effective stories about your work, and learn the required web design and layout skills to build compelling case studies that are fully responsive across devices.

0101	Justin Miller	Seats (Total: 10)
	Meets September 9, 2019 - October 9, 2019	
	W 12:00pm - 2:45pm	HBK 2116

INST639B**Practical Skills in HCI; Participatory Design Research Practicum (Kids Team)**

Credits: 1 Grading Method: Sat-Fail,
 Audit

Current industry practice in the HCI and UX field involves being familiar with many practical skills and specialized software. In this repeatable course, HCIM students will be able to acquire some of these vital practical skills in order to be better prepared for joining industry upon graduation. Furthermore, this will also be an opportunity for students to develop their portfolio for future job hunts. Offered in both Fall and Spring semesters, the intention is for these "practical skills" to be taught by professional instructors with expert knowledge. The content of the course will vary from semester to semester, but here is a sample of topics: Graphic and visual design and communication; UX design and research in games; Voice and gestures; UX mockups and wireframing tools; Practical web design and technologies; UX project management software.

Class will meet in person on the following dates: 9/12, 09/19, 09/26, 10/03, and 10/10."

0101	Elizabeth Bonsignore	Seats (Total: 10)
	Th 3:30pm - 5:45pm	HBK 2105
	Contact instructor or department for details.	

INST639C**Practical Skills in HCI; Makerspace**

Credits: 1 Grading Method: Sat-Fail,
 Audit

Current industry practice in the HCI and UX field involves being familiar with many practical skills and specialized software. In this repeatable course, HCIM students will be able to acquire some of these vital practical skills in order to be better prepared for joining industry upon graduation. Furthermore, this will also be an opportunity for students to develop their portfolio for future job hunts. Offered in both Fall and Spring semesters, the intention is for these "practical skills" to be taught by professional instructors with expert knowledge. The content of the course will vary from semester to semester, but here is a sample of topics: Graphic and visual design and communication; UX design and research in games; Voice and gestures; UX mockups and wireframing tools; Practical web design and technologies; UX project management software.

Class will meet in person on the following dates: 10/21, 10/28, 11/04, 11/11, and 11/18. Hone your creativity as you focus on designing and creating your own 3-D printing project in the collaborative work space in the Human-Computer Interaction Lab.

0101	Alex Leitch	Seats (Total: 10)
	Meets October 21, 2019 - November 18, 2019	
	M 6:00pm - 8:45pm	HBK 2105

INST639D Practical Skills in HCI; Research through Design

Credits: 1 Grading Method: Sat-Fail,
Audit

Current industry practice in the HCI and UX field involves being familiar with many practical skills and specialized software. In this repeatable course, HCIM students will be able to acquire some of these vital practical skills in order to be better prepared for joining industry upon graduation. Furthermore, this will also be an opportunity for students to develop their portfolio for future job hunts. Offered in both Fall and Spring semesters, the intention is for these "practical skills" to be taught by professional instructors with expert knowledge. The content of the course will vary from semester to semester, but here is a sample of topics: Graphic and visual design and communication; UX design and research in games; Voice and gestures; UX mockups and wireframing tools; Practical web design and technologies; UX project management software.

In this research seminar, students will learn the Research through Design (RtD) approach, with which they can speculate on what the future could and should be by making new things that disrupt, complicate, or transform the current state of the world. Students will explore the theoretical and historical grounding of RtD, nuanced differences and similarities between RtD and design practice, and their relation to the Human-Computer Interaction (HCI) research.

0101	Eun Kyoung Choe	Seats (Total: 10)
	Meets October 24, 2019 - November 21, 2019	
	Th 2:00pm - 4:45pm	HBK 2119

INST641 Policy and Ethics in Digital Curation

Credits: 3 Grading Method: Regular

Prerequisite: INST604; or INST640; or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

Discussion of strategies to address intellectual property, privacy, security and other policy and ethics concerns raised by the curation of digital records and data.

ML01	Trevor Owens	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

INST643 Curation in Cultural Institutions

Credits: 3 Grading Method: Regular

Restriction: Permission of INFO-College of Information Studies.

An overview of the principles, practices, and current debates in the management, care and representation of digital artifacts in libraries, archives, and museums.

0101	Eric Hung	Seats (Total: 30)
	W 2:00pm - 4:45pm	HBK 0103

INST650 Facilitating Youth Learning in Formal and Informal Environments

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST650 or LBSC640. Formerly: LBSC640.

The historical, organizational, and contemporary contexts of formal and informal learning spaces; the principles of teaching, learning, and information literacy that underlie the formal and informal learning spaces; and the leadership role that information professionals can play within their schools, libraries and communities.

CT01	Renee Hill	Seats (Total: 15)
	Class time/details on ELMs	ONLINE
ML01	Renee Hill	Seats (Total: 15)
	Class time/details on ELMs	ONLINE

INST651 Promoting Rich Learning with Technology

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST651 or LBSC642. Formerly: LBSC642.

Exploration of how technology can be used to promote rich learning experiences, with a particular focus on youth populations. Assessment of the how, when, and why of infusing technology into the teaching and learning process.

Course is restricted to the Youth Experience Certificate Cohort.

CT02	Mega Subramaniam	Seats (Total: 12)
	Class time/details on ELMs	ONLINE
	<i>Course is restricted to students in the School Library Certificate program.</i>	
ML01	Mega Subramaniam	Seats (Total: 13)
	Class time/details on ELMs	ONLINE

INST682 Personal Health Informatics & Visualization

Credits: 3 Grading Method: Regular,
Audit

Personal Health Informatics cover a broad concept that encompasses an array of approaches to collect, store, share, analyze, and reflect on personal health data. Not only health care providers are relying on Health Technologies to improve patient care, people are increasingly using health devices and apps in their everyday life. Individuals have started using new technologies to collect data, increase awareness, and reflect on and change their behaviors. They also use various tools for curiosity and fun. This course will provide an overview of this exciting field and examine how social and behavioral theories can be applied to create effective health applications. It is difficult to create health technologies that can successfully be integrated into people's daily life due to many obstacles in individuals' data collection, integration, self-reflection, and sharing practices. Understanding these challenges is an important part of designing Health Technologies. Therefore, this course will cover HCI and design thinking methods that you can leverage in understanding the adoption of Health Technologies. Moreover, visualizations facilitate people to gain insights from their data, so we will cover common visualization approaches used in the personal data contexts.

Jointly offered with CMSC838X. Credit only granted for INST682 or CMSC83 8X.

0101	Eun Kyoung Choe	Seats (Total: 30)
	Tu 2:00pm - 4:45pm	HBK 2119

INST701 Introduction to Research Methods

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC701, INFM718M or INST701. Formerly: LBSC701, INFM718M.

Techniques and strategies of research as applied to the definition, investigation, and evaluation of information problems. Qualitative, quantitative, and mixed methods of research design methods are considered from the aspects of implementation, analysis, and interpretation.

0101	Margaret Chmiel	Seats (Total: 30)
	W 6:00pm - 8:45pm	HBK 0115

INST704

Inclusive Design in HCI

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: INST631; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST728Z OR INST704. Formerly: INST728Z.

An introduction to inclusive technology design, that is, the design and evaluation of user interfaces for diverse users and use contexts. Building on basic concepts in human-computer interaction, students will learn about design exclusion and barriers to use, and methods by which these can be overcome. Assistive input and output technologies will also be covered. Populations include older adults, users with visual, cognitive or motor impairments, users who are deaf or hard of hearing, children, users in low resource contexts, and users in mobile contexts. Research trends and practical design considerations (e.g., web accessibility requirements) will be covered. Students will interact with the material through readings, discussion, and individual and group assignments.

0101	Hernisa Kacorri	Seats (Total: 30)
	Tu 11:00am - 1:45pm	HBK 0302J

INST706

Project Management

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: INFM603 and INFM612; or (LBSC631 and LBSC671); or (LBSC635 and LBSC670); or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST706 or INFM706. Formerly: INFM706.

Comprehensive overview of project management, focusing on the needs of information resource (IR) projects. Concepts and techniques for planning and execution of projects including developing work breakdown structure, estimating costs, managing risks, scheduling, staff and resource allocation, team building, communication, monitoring, control, and other aspects of successful project completion.

ML01	Vikas Sahasrabudhe	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

INST709

Independent Study

Credits: 1-3 Grading Method: Regular,
Audit

Intensive individual study, reading, or research in an area of specialized interest under faculty supervision. Registration limited to the advanced student with the approval of the advisor and of the faculty member involved.

0301	Brian Butler	Seats (Total: 3)
	Contact instructor or department for details.	
0501	Amanda Lazar	Seats (Total: 5)
	Contact instructor or department for details.	
0701	Kenneth Heger	Seats (Total: 3)
	Contact instructor or department for details.	
1201	Renee Hill	Seats (Total: 5)
	Contact instructor or department for details.	
1301	Jennifer Golbeck	Seats (Total: 3)
	Contact instructor or department for details.	
2201	Christopher Antoun	Seats (Total: 5)
	Contact instructor or department for details.	
2301	Bill Kules	Seats (Total: 10)
	Contact instructor or department for details.	
2401	Jessica Vitak	Seats (Total: 5)
	Contact instructor or department for details.	
2601	Niklas Elmqvist	Seats (Total: 5)
	Contact instructor or department for details.	
2801	Eun Kyoung Choe	Seats (Total: 5)
	Contact instructor or department for details.	
3301	Hernisa Kacorri	Seats (Total: 5)
	Contact instructor or department for details.	
3401	Ge Gao	Seats (Total: 5)
	Contact instructor or department for details.	
4301	Ursula Gorham-Oscilowski	Seats (Total: 5)
	Contact instructor or department for details.	
4501	Tamara Clegg	Seats (Total: 3)
	Contact instructor or department for details.	

4901	Gregg Vanderheiden	Seats (Total: 5)
	Contact instructor or department for details.	

INST710 User Experience Research Methods

Credits: 3 Grading Method: Regular

Students will learn to conduct user research in industry and to provide foundational knowledge needed for academic research. It examines the theoretical and epistemological differences between research paradigms and provides an overview of qualitative, quantitative and mixed-method approaches. It overviews user-centered design (UCD) methods, and uses Contextual Inquiry/Contextual Design as the backbone for a research project, incorporating related formative UCD methods and techniques. It is a project-based course, where students conduct a semester-long project to prepare them for the HCIM Capstone as well as other types of formative user research.

0101	Wayne Lutters	Seats (Total: 35)
	W 6:00pm - 8:45pm	HBK 0302J
	<i>Restricted to HCIM majors.</i>	

INST728B Special Topics in Information Studies; Location Intelligence

Credits: 3 Grading Method: Regular,
Audit

Selected topics in information studies.

Prerequisites: INFM600; INFM603; INST630; INST733; or permission of instructor.

ML01	P Kshetry	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

INST728C Special Topics in Information Studies; Information Governance and Data Quality

Credits: 3 Grading Method: Regular,
Audit

Selected topics in information studies.

ML01	Jonathan Adams	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

INST733 Database Design

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: LBSC690, LBSC671, or INFM603; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST733 or LBSC793. Formerly: LBSC793.

Principles of user-oriented database design. Requirements analysis. Data modelling. Data integrity and security and multi-user databases. Implementing an information system using a database management system (DBMS).

0101	Vedat Diker	Seats (Total: 25)
	M 6:00pm - 8:45pm	HBK 1108

INST734 Information Retrieval Systems

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: LBSC671 or INFM603; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST734 or LBSC796. Formerly: LBSC796.

Principles of organizing and providing access to information using automated information storage and retrieval systems. Retrieval systems models, index language selection, data structure, user interfaces, and evaluation for text and multimedia applications.

0101	Petra Galuscakova	Seats (Total: 10)
	Th 6:00pm - 8:45pm	TYD 1118

INST735 Computational Linguistics I

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: CMSC421 or CMSC422; or students who have taken courses with comparable content may contact the department; or permission of instructor. Cross-listed with: CMSC723, LING723. Credit only granted for: CMSC723, LING723, or INST735. Additional information: CMSC students may only receive PhD Comp. credit for CMSC723 or CMSC823, not both.

Fundamental methods in natural language processing. Topics include: finite-state methods, context-free and extended context-free models of syntax; parsing and semantics interpretation; n-gram and Hidden Markov models, part-of-speech tagging; natural language applications such as machine translation, automatic summarization, and question answering.

0101	Hal Daume	Seats (Total: 90)
	TuTh 3:30pm - 4:45pm	IRB 1116

INST750 Advanced Data Science

Credits: 3 Grading Method: Regular, Audit

Prerequisite: INFM603 and INST737; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INFM750 OR INST750. Formerly: INFM750.

Application of data science techniques to unstructured, real-world datasets including social media and geo-referenced sources. Techniques and approaches to extract information relevant for experts and non-experts in areas that include smart cities, public health, and disaster management.

0101	Vanessa Frias-Martinez	Seats (Total: 30)
	W 2:00pm - 4:45pm	HBK 0115

INST760 Data Visualization

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: INST630; or INFM603; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: INST760 or INST728V. Formerly: INST728V.

Introduction to the science and technology of data visualization--the graphical representation of data to aid understanding--and includes both theoretical foundations as well as practical applications of integrated visualization techniques on real-world problems. Application of these techniques to state-of-the-art problem domains within research, society, and industry.

0101	Niklas Elmqvist	Seats (Total: 30)
	Th 2:00pm - 4:45pm	HBK 0115

INST775 HCIM CAPSTONE PREP

Credits: 3 Grading Method: Regular

Prerequisite: INST631, INST632, and INST717; and must have completed Research Methods; and permission of INFO-College of Information Studies. Or permission of instructor. Restriction: Must be taken in the fall semester of the year in which the student plans to graduate; and permission of INFO-College of Information Studies.

Students will define a project, which requires a high level of background research, rigor in execution and evaluation, and documentation. Capstone projects may follow the design, prototyping and evaluation process from end-to-end or may focus on a subset of elements in that process, such as formative study and design.

0101	Bill Kules	Seats (Total: 28)
	Th 6:00pm - 8:45pm	HBK 0302J
	M 1:00pm - 4:45pm	HBK 0302J

INST782 Arrangement, Description, and Access for Archives

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: INST604; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC684, LBSC781, LBSC782, or INST782. Formerly: LBSC684, LBSC781, and LBSC782.

Introduction to the key concepts and practices involved with arrangement and description of archives, and the techniques appropriate to enable users to access archival information in traditional and nontraditional archival contexts.

0101	Kenneth Heger	Seats (Total: 30)
	W 6:00pm - 8:45pm	BPS 1232

INST799 Master's Thesis Research

(Perm req) Credits: 1-6 Grading Method: Regular, Sat-
 Fail

Contact department for information to register for this course.

INST800 The Engaged Intellectual: An Introduction to Research and Academic Work

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Permission of INFO-College of Information Studies; and restricted to students in Ph.D. in Information Studies (INFS) program.

An introduction to the academic life with a particular focus on what it means to undertake research, teaching, and service.

Restricted to Doctoral Students.

0101	Mega Subramaniam	Seats (Total: 20)
	Tu 2:00pm - 4:45pm	HBK 4113

INST810 Individual Research Experience

Credits: 3 Grading Method: Regular,
 Audit

Credit only granted for: INST810 or LBSC810. Formerly: LBSC810.

Pre-candidacy individual research experience directed by a faculty member.

0301	Brian Butler	Seats (Total: 5)
	Contact instructor or department for details.	
0401	Joel Chan	Seats (Total: 5)
	Contact instructor or department for details.	
0501	Amanda Lazar	Seats (Total: 5)
	Contact instructor or department for details.	
1101	Paul Jaeger	Seats (Total: 5)
	Contact instructor or department for details.	
1301	Jennifer Golbeck	Seats (Total: 4)
	Contact instructor or department for details.	
1501	Beth St Jean	Seats (Total: 2)
	Contact instructor or department for details.	
1601	Vanessa Frias-Martinez	Seats (Total: 2)
	Contact instructor or department for details.	
2101	Katie Shilton	Seats (Total: 5)
	Contact instructor or department for details.	
2401	Jessica Vitak	Seats (Total: 5)
	Contact instructor or department for details.	
2801	Eun Kyoung Choe	Seats (Total: 10)
	Contact instructor or department for details.	
2901	Susan Winter	Seats (Total: 5)
	Contact instructor or department for details.	

INST888
Doctoral Seminar

Credits: 3 Grading Method: Regular,
 Audit

Advanced seminar on selected topics in information studies.

0101	Katie Shilton	Seats (Total: 20)
	W 2:00pm - 4:45pm	BPS 1238

INST898
Pre-Candidacy Research

(Perm req)

Credits: 1-8

Grading Method: Regular

Contact department for information to register for this course.

INST899

Doctoral Dissertation Research

(Perm req)

Credits: 1-6

Grading Method: Regular, Sat-

Fail

Contact department for information to register for this course.

ISRL

Israel Studies

Fall 2019

ISRL249C

Selected Topics in Israel Studies; Contemporary Israel: History and Society

Credits: 3

Grading Method: Regular,

Pass-Fail, Audit

Topics in the study of Zionism and contemporary Israel from the 1880's to the present. Future offerings may address history, politics, or culture.

Contact department for information to register for this course.

ISRL249D

Selected Topics in Israel Studies; Women in Israel

Credits: 3

Grading Method: Regular,

Pass-Fail, Audit

Topics in the study of Zionism and contemporary Israel from the 1880's to the present. Future offerings may address history, politics, or culture.

Contact department for information to register for this course.

ISRL249E

Selected Topics in Israel Studies; Writing Israel

Credits: 3

Grading Method: Regular,

Pass-Fail, Audit

Topics in the study of Zionism and contemporary Israel from the 1880's to the present. Future offerings may address history, politics, or culture.

Contact department for information to register for this course.

ISRL249N

Selected Topics in Israel Studies; Zionism and Sexual Revolution

Credits: 3

Grading Method: Regular,

Pass-Fail, Audit

General Education: DSHU

Topics in the study of Zionism and contemporary Israel from the 1880's to the present. Future offerings may address history, politics, or culture.

Cross-listed with JWST219G. Credit granted for ISRL249N or JWST219G.

0101	Shirelle Doughty	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

ISRL289I

The Israeli/Palestinian Conflict: Fundamental Questions

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH General Education: DSHS, SCIS

Why are Palestinians and Israelis unable to resolve their conflict? Will they ever? Using insights and methodologies from a variety of disciplines and contrasting interpretations of history, this course will examine why the Palestinian-Israeli conflict continues, why it has become so central in world politics and how it connects with other global issues.

0101	Paul Scham	Seats (Total: 20)
	MW 2:00pm - 2:50pm	SQH 1120
	Tu 2:00pm - 2:50pm	EDU 3236 Discussion
0102	Paul Scham	Seats (Total: 20)
	MW 2:00pm - 2:50pm	SQH 1120
	Tu 4:00pm - 4:50pm	LEF 1222 Discussion
0103	Paul Scham	Seats (Total: 20)
	MW 2:00pm - 2:50pm	SQH 1120
	W 4:00pm - 4:50pm	KEY 0124 Discussion
0104	Paul Scham	Seats (Total: 20)
	MW 2:00pm - 2:50pm	SQH 1120
	F 12:00pm - 12:50pm	LEF 1222 Discussion

ISRL329N

Special Topics in Israel Studies; The United States and Israel: Likely or Unlikely Allies?

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Topics in the study of Zionism and contemporary Israel from the 1880's to the present at an intermediate level. Individual sections may address history, politics, or culture.

Cross-listed with PLCY388N and GVPT368B. Credit only granted for ISRL329N, PLCY388N or GVPT368B.

0101	Scott Lasensky	Seats (Total: 35)
	W 4:00pm - 6:30pm	SQH 1117

History of Modern Israel

General Education: DSHS

History of modern Israel since the beginning of the Zionist settlement in 1882. Attention to different interpretations and narratives of Israel's history, including the historical and ideological roots of Zionism, the establishment of the State of Israel, ideological forces, wars, and the triumphs and crises of democracy.

0101	Moran Stern	Seats (Total: 35)
	W 4:00pm - 6:30pm	TYD 2110

Investigating Topics in Israel Studies; The Psychology of Conflict Resolution

Topics in the study of Zionism and contemporary Israel from the 1880's to the present at an intermediate level. Individual sections may address history, politics, or culture.

Contact department for information to register for this course.

Investigating Topics in Israel Studies; Arab-Israeli Relations

Topics in the study of Zionism and contemporary Israel from the 1880's to the present at an intermediate level. Individual sections may address history, politics, or culture.

Contact department for information to register for this course.

Special Topics in Study Abroad; Israeli Society in Israeli Cinema

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

Seminar in Israel Studies; The Israeli War Discourse

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Intensive study of an Israel Studies topic. Expected work product is a substantial research or analysis paper or appropriate equivalent.

Cross-listed with COMM498M. Credit only granted for ISRL448M or COMM498M . This online course focuses on a unique discourse in Israel, 'war-normalizing discourse', a set of linguistic, discursive, and cultural devices that blur the anomalous characteristics of war by transforming war into a "normal" part of life. The course will examine the reciprocal relations between this discourse, Israeli culture and society, and foreign policy.

0101	Elie Friedman	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

ISRL448O Seminar in Israel Studies; History of Palestine in Modern Times

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Intensive study of an Israel Studies topic. Expected work product is a substantial research or analysis paper or appropriate equivalent.

Cross-listed with HIST419I. Credit granted for ISRL448O or HIST419I. This seminar explores the contested history of Palestine from the 18th century to 1948. We will explore some of the major historiographical debates pertaining to Ottoman Palestine until WWI, Zionist settlement and Arab resistance, the British mandate and the emergence of the State of Israel. Topics covered include the emergence and trajectories of Zionism and Palestinian nationalism, "Arab Jews," Palestine's economy, colonialism, religiosity and the politics of memory.

0101	Shay Hazkani	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	HJP 2114

ITAL Italian Fall 2019

ITAL103 Intensive Elementary Italian

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Not open to fluent/native speakers of Italian. Credit only granted for: ITAL103 or ITAL121.

Covers speaking, reading, writing, listening, and culture of Italian-speaking world.

0201	Valeria Nardi	Seats (Total: 20)
	Tu 11:00am - 12:15pm	JMZ 1122
	Th 11:00am - 12:15pm	JMZ 1122
	W 11:00am - 11:50am	JMZ 3205

0301	Joseph Falvo	Seats (Total: 20)
	MW 2:00pm - 3:15pm	JMZ 1224
	F 2:00pm - 2:50pm	JMZ 1224

ITAL121 Accelerated Italian I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Credit only granted for: ITAL103 or ITAL121.

An intensive beginning course in Italian language skills: guided practice in reading, writing, understanding and conversation, to enable the student to move more quickly to advanced courses. Restricted to students already having a good background in at least one other foreign language. When taken with ITAL122, may be used to satisfy language requirement.

Jointly offered with ITAL 121H.

Contact department for information to register for this course.

ITAL121H Accelerated Italian I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Credit only granted for: ITAL103 or ITAL121.

An intensive beginning course in Italian language skills: guided practice in reading, writing, understanding and conversation, to enable the student to move more quickly to advanced courses. Restricted to students already having a good background in at least one other foreign language. When taken with ITAL122, may be used to satisfy language requirement.

For general honors students only. Jointly offered with ITAL 121.

Contact department for information to register for this course.

ITAL122 Accelerated Italian II

Credits: 3 Grading Method: Regular, CORE: HO
Pass-Fail, Audit

Prerequisite: ITAL121; or must have appropriate Foreign Language Placement Test (FLPT) score. Credit only granted for: ITAL203 or ITAL122.

Continuation of ITAL121. Completion of accelerated cycle. May be used to satisfy ARHU Global Engagement requirement.

Contact department for information to register for this course.

ITAL169C Special Topics in Study Abroad I; Italian Conversation

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ITAL169E Special Topics in Study Abroad I; Elementary Italian I

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ITAL169F Special Topics in Study Abroad I; The Florence Experience I: Beginning Italian I

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ITAL169R Special Topics in Study Abroad I; Introduction to Italian Language and Culture

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ITAL203 Intensive Intermediate Italian

Credits: 4 Grading Method: Regular, CORE: HO
Pass-Fail, Audit

*Prerequisite: ITAL103; or must have appropriate Foreign Language Placement Test (FLPT) score.
Restriction: Must not have completed ITAL122; and must not be a fluent/native speaker of Italian.
Credit only granted for: ITAL203 or ITAL122.*

Covers speaking, reading, writing, listening, and culture of Italian-speaking world.

0101	Valeria Nardi	Seats (Total: 25)
	Th 2:00pm - 3:15pm	JMZ 1122
	Tu 2:00pm - 3:15pm	JMZ 0208
	W 2:00pm - 2:50pm	JMZ 1122

ITAL204**Review Grammar and Composition**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: HO

Prerequisite: ITAL203 or ITAL122; or must have appropriate Foreign Language Placement Test (FLPT) score.

An intensive review of major aspects of contemporary grammatical usage; training in comprehension; an introduction to guided composition.

0101	Stefania Amodeo	Seats (Total: 20)
	MWF 10:00am - 10:50am	JMZ 2206

ITAL207**Reading and Writing in Italian**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSHU

Prerequisite: ITAL204; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a fluent/native speaker of Italian.

Culture-based, process approach to reading and writing in Italian; selected grammatical topics.

Contact department for information to register for this course.

ITAL211**Intermediate Conversation**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: HO

Prerequisite: ITAL203; or permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must not be a fluent/native speaker of Italian.

Practice in spoken Italian based on reading and listening exercises in a variety of genres. Written assignments and exams.

Contact department for information to register for this course.

ITAL261**Cuisine, Culture, and Society in Italy Yesterday and Today**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: HO

Prerequisite: ITAL204; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Exposes students to an important aspect of Italian culture: the art of gastronomy. Provides an in-depth understanding of the close relationship between food and culture, while enriching their knowledge of the Italian language through reading and analysis of various texts which deal with the preparation and adaptation of Italian food in different cultural settings. Taught in Italian.

0101	Stefania Amodeo	Seats (Total: 20)
	MWF 1:00pm - 1:50pm	JMZ 1103

ITAL269I Special Topics in Study Abroad II; Intensive Intermediate Italian I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ITAL269R Special Topics in Study Abroad II; Elementary Italian I

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ITAL301 Italian Composition

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ITAL207; or students who have taken courses with comparable content may contact the department.

Techniques of composition; grammatical analysis; various genres; vocabulary.

Contact department for information to register for this course.

ITAL306 Commercial Italian I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ITAL301; or permission of ARHU-School of Languages, Literatures, and Cultures department.

An introduction to Italian Business language and culture. Special emphasis on communicative strategies used in business transactions and applications. Reading and discussion of relevant articles relating to business world from on-line newspapers and magazines.

Contact department for information to register for this course.

ITAL311 Advanced Oral Expression: Current Events

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ITAL211; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Oral expression; development of idiomatic forms and vocabulary to level of the Italian press.

0101	Stefania Amodeo	Seats (Total: 20)
	MWF 11:00am - 11:50am	JMZ 1103

ITAL369W Special Topics in Study Abroad III; Composition and Style

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

ITAL386 Experiential Learning

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Prerequisite: Must have a Learning Proposal approved by the Office of Experiential Learning Programs, faculty sponsor, and student's internship sponsor. Restriction: Junior standing or higher.

Contact department for information to register for this course.

ITAL399 Directed Study in Italian

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Intended for undergraduates who wish to work on an individual basis with a professor of their choice.

Contact department for information to register for this course.

ITAL411 Monsters and Demons: the Faces of Evil in Dante's Inferno

Credits: 3 Grading Method: Regular, General Education: DSHU
Pass-Fail, Audit

An interdisciplinary study of Dante's Inferno as represented in the Divine Comedy. Special emphasis on Dante's own portrayal of monsters and demons and their roles in the poet's eschatological vision of Hell. Taught in English

0101	Joseph Falvo	Seats (Total: 25)
	MWF 1:00pm - 1:50pm	JMZ 0103

ITAL431 Italian Civilization in Translation

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: ITAL431 or ITAL432.

Political, social, intellectual, literary and artistic forces shaping contemporary Italy from the late Middle Ages to the present. Taught in English.

Contact department for information to register for this course.

ITAL471 Italian Cinema: A Cultural Approach in Translation

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: ITAL471 or ITAL472.

The culture of Italy through the medium of film from the silent days up to the present. Taught in English.

Contact department for information to register for this course.

ITAL478D Colloquium in Italian; Monsters and Demons: the Faces of Evil in Dante's Inferno

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Colloquium section taught in Italian to accompany 400-level Italian courses taught in English. Discussion, presentations, readings.

0101	Joseph Falvo	Seats (Total: 10)
	W 11:00am - 11:50am	JMZ 3118

ITAL499 Special Topics in Italian Studies

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

ITAL499T Special Topics in Italian Studies; Italian Cities: History through Urban Form

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

ITAL499V Special Topics in Italian Studies; Italian Comedy on Stage and Screen

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

JAPN Japanese**Fall 2019**

JAPN101 Elementary Japanese I

Credits: 6 Grading Method: Regular

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score.

Introduction to basic patterns of contemporary spoken Japanese and to the two phonetic syllabaries (Katakana and Hiragana).

This course has been put on a timed release system. Seats will be opened gradually by the registrar's office, to a total of 15 seats per section.

0101	Makiko Inoue, Takehiro Iizuka	Seats (Total: 15)
	MWF 10:00am - 10:50am	JMZ 0122
	TuTh 9:30am - 10:45am	JMZ 0122
0201	Makiko Inoue, Takehiro Iizuka	Seats (Total: 15)
	MWF 11:00am - 11:50am	JMZ 0122
	TuTh 11:00am - 12:15pm	JMZ 0122
0301	Makiko Inoue, Takehiro Iizuka	Seats (Total: 15)
	MWF 2:00pm - 2:50pm	JMZ 0122
	TuTh 2:00pm - 3:15pm	JMZ 0122

JAPN201 Intermediate Japanese I

Credits: 6 Grading Method: Regular CORE: HO

Prerequisite: Minimum grade of C- in JAPN102; or or appropriate Foreign Language Placement Test (FLPT) score.

Contemporary spoken and written Japanese.

0101	Etsuko Yamakita	Seats (Total: 15)
	MWF 11:00am - 12:50pm	JMZ 2125

0201	Etsuko Yamakita	Seats (Total: 15)
	MWF 1:00pm - 2:50pm	JMZ 1226

JAPN301

Advanced Japanese I

Credits: 6 Grading Method: Regular

Prerequisite: Minimum grade of C- in JAPN202; or permission of instructor.

Advanced conversation, oral comprehension, and selected readings.

0101	Kumiko Akikawa	Seats (Total: 15)
	MWF 11:00am - 12:50pm	JMZ 3122
0201	Kumiko Akikawa	Seats (Total: 15)
	MWF 1:00pm - 2:50pm	JMZ 3122

JAPN325

Modern Japanese Literature and Film (In Translation)

Credits: 3 Grading Method: Regular

Explores and questions the significance of some of modern Japan's most dynamic historical transformations, pressing social issues, and modes of cultural expression. Covers the Meiji period (1868-1912) to the 21st century.

0101	Michele Mason	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	JMZ 3205

JAPN386

Experiential Learning

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Prerequisite: Must have a Learning Proposal approved by the Office of Experiential Learning Programs, faculty sponsor, and student's internship sponsor. Restriction: Junior standing or higher.

Contact department for information to register for this course.

JAPN402

Readings in Japanese Cultural Studies

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in JAPN302; or permission of instructor.

Development of advanced reading, vocabulary, grammar, and translation skills through selected readings in Japanese drawn from the fields of history, social sciences, cultural studies, film studies, and popular culture.

0101	Jyana Browne	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	JMZ 2120

JAPN407**The Art of Translation**

Credits: 3 Grading Method: Regular

Prerequisite: 1 course with a minimum grade of C- from (JAPN401, JAPN402); or students who have taken courses with comparable content may contact the department.

Theory and practice of translation. Variety of genres. Japanese to English.

0101	Michele Mason	Seats (Total: 14)
	TuTh 11:00am - 12:15pm	JMZ 3122

JAPN421**History of the Japanese Language**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: JAPN102; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Investigation of the origin of the Japanese language, its relationship with other languages, and its development. Taught in English, but presumes knowledge of Kanji (Chinese characters).

0101	Samuel Ramsey	Seats (Total: 20)
	MW 2:00pm - 3:15pm	JMZ 2122

JAPN498M**Special Topics in Japanese Studies; Mapping Premodern Japan**

Credits: 3 Grading Method: Regular

Special topics in Japanese studies. Taught in English.

Mapping Premodern Japan investigates travel in Japan through concentrated study of a key route in the premodern period. We will explore the role travel played in larger social, political, economic, and cultural structures and how stories of travel shaped ideas of identity, place, and national culture. We will analyze scholarship, conduct research, and learn the process for developing authentic scholarship in Cultural Studies. The course will culminate in a digital humanities final project in which students will conduct research on the major site of study and present their findings using digital storytelling. Taught in English. The site of exploration for Fall 2019 will be the Tokaido, the major highway connecting the shogunal capital in Edo (modern-day Tokyo) and the imperial capital in Kyoto.

0101	Jyana Browne	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	JMZ 2123

JAPN499

Directed Study in Japanese

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail

Contact department for information to register for this course.

JOUR

Journalism

Fall 2019

JOUR130

Self-Presentation in the Age of YouTube

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: FSOC

Credit only granted for: COMM107, COMM200, ENES143, INAG110, JOUR130 or THET285.

Additional information: May not count toward the Journalism major.

Students, as they make use of evolving technologies, need to be able to present themselves effectively in front of any number of different audiences through any number of different outlets. Whether in an interview on radio, a guest presentation at a conference, in comments on a video blog, in commentary on TV, in the lead on a self-produced YouTube video, or as spokesperson in front of investors or management, professionals need strong oral communication skills. This class focuses on strengthening those skills through active individual and group presentations, as well as, through discussion of key techniques and group critique of presentation publicly available in the social media space on sites such as YouTube.

0101	Katherine McAdams, Amber Moore	Seats (Total: 22)
	MW 9:30am - 10:45am	KNI 1103
0201	Amber Moore	Seats (Total: 22)
	TuTh 12:30pm - 1:45pm	KNI 1206

FC01	Kelly Stepno MW 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 20) KNI 1103
FC03	Renee Poussaint TuTh 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 20) KNI 3202
FC04	Kelly Stepno MW 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 20) KNI 1103
FC05	Mark Gray TuTh 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 20) KNI 3202

JOUR150

Introduction to Mass Communication

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS, DSSP

Additional information: Not applicable toward journalism major.

Survey of the functions and effects of the mass media in the United States. A consumer's introduction to newspapers, television, radio, film, sound recording, books, magazines, and new media technology.

0101	Sohana Nasrin TuTh 11:00am - 12:15pm	Seats (Total: 30) KNI 1103
0201	Edward Alwood TuTh 2:00pm - 3:15pm	Seats (Total: 30) KNI 1103
0301	Edward Alwood TuTh 12:30pm - 1:45pm	Seats (Total: 35) KNI 3202
0401	Denitsa Yotova Class time/details on ELMs	Seats (Total: 35) ONLINE
0501	Denitsa Yotova Class time/details on ELMs	Seats (Total: 35) ONLINE

0601	Nandikoor Bhat	Seats (Total: 35)
	Class time/details on ELMs	ONLINE

JOUR152 Introduction to Storytelling with Code

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in JOUR200.

An introduction to the ways markup and programming languages and computational thinking are transforming news reporting and storytelling.

Attendance is required on the first day of class and last day of class.

0101	Sean Mussenden, Alexander Pyles	Seats (Total: 70)
	Meets October 14, 2019 - December 9, 2019	
	F 10:00am - 10:50am	KNI 1208
	Class time/details on ELMs	ONLINE
0201	Alexander Pyles, Sean Mussenden	Seats (Total: 70)
	Meets October 14, 2019 - December 9, 2019	
	F 11:00am - 11:50am	KNI 1208
	Class time/details on ELMs	ONLINE

JOUR175 Media Literacy

Credits: 3 Grading Method: Regular, CORE: IE, D General Education: DSSP,
Pass-Fail, Audit DVUP

Additional information: Not applicable toward journalism major.

An analysis of the information, values and underlying messages conveyed via television, newspapers, the internet, magazines, radio and film. Examines the accuracy of those messages and explores how media shape views of politics, culture and society.

0101	Susan Moeller	Seats (Total: 60)
	Class time/details on ELMs	ONLINE
	<i>Mandatory synchronous online meetings 6-7pm on 8/27, 9/24, 10/22, 11/19 Online, real-time ELMS Chat" office hours Tuesdays 9:30 - 10:30am.</i>	

0102	Wei-Ping Li TuTh 2:00pm - 3:15pm	Seats (Total: 35) VMH 1203
0103	Sholpan Kozhamkulova Class time/details on ELMs <i>Mandatory synchronous online meetings 6-7pm on 8/27, 9/24, 10/22, 11/19</i>	Seats (Total: 35) ONLINE
0105	Hazel Feigenblatt Class time/details on ELMs <i>Mandatory synchronous online meetings 6-7pm on 8/27, 9/24, 10/22, 11/19</i>	Seats (Total: 35) ONLINE

JOUR181

Grammar for Journalists

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: ENGL181, ENGL281, or JOUR181.

The basic grammatical structures of standard American written English and its conventions of punctuation, diction and usage in journalistic writing.

0101	Linda Coleman Tu 3:30pm - 4:20pm	Seats (Total: 170) LEF 2205
0201	Linda Coleman Tu 12:30pm - 1:20pm	Seats (Total: 70) KNI 1208
FC01	Justin Thompson F 11:00am - 11:50am <i>Restricted to students in Freshman Connection.</i>	Seats (Total: 33) EDU 1107

JOUR199

Survey Apprenticeship

(Perm req)

Credits: 1 Grading Method: Sat-Fail

College-monitored experience in approved mass-communications organizations and industries.

0101	Adrianne Flynn Contact instructor or department for details.	Seats (Total: 40)
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JOUR200

Journalism History, Roles and Structures

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Introduction to the study of journalism from the standpoint of media history and sociology.

0101	Bobbie Foster	Seats (Total: 31)
	MW 9:30am - 10:45am	KNI 1208
	<i>Open to journalism majors and prospective journalism majors.</i>	
0301	Ira Chinoy	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	KNI 1208
	<i>Restricted to journalism majors only.</i>	
0401	Krishnan Vasudevan	Seats (Total: 30)
	MW 12:30pm - 1:45pm	KNI 1208
	<i>Open to prospective journalism majors.</i>	
0501	Ira Chinoy	Seats (Total: 30)
	TuTh 9:30am - 10:45am	KNI 1208
	<i>Restricted to journalism majors only.</i>	
0601	Carole Lee	Seats (Total: 31)
	MW 11:00am - 12:15pm	KNI 1208
	<i>Open to journalism majors and prospective journalism majors.</i>	
FC01	Carole Lee	Seats (Total: 32)
	MW 4:30pm - 5:45pm	KNI 3202
	<i>Restricted to students in Freshman Connection.</i>	

JOUR201

News Writing and Reporting I

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: Minimum grade of C- in ENGL101, JOUR181, and JOUR200; and permission of JOUR-Philip Merrill College of Journalism. Restriction: For students intending to be journalism majors; and permission of JOUR-Philip Merrill College of Journalism.

Introduction to news for the print and electronic media, development of new concepts: laboratory in news-gathering tools and writing skills. Students who earned 80% or higher on the JOUR181 diagnostic are exempt from the JOUR181 prerequisite.

0201	Joseph Weber M 7:00pm - 8:50pm W 7:00pm - 8:50pm	Seats (Total: 18) KNI 2105 KNI 3210
0301	Merrilee Cox MW 2:00pm - 3:50pm	Seats (Total: 18) KNI 2105

JOUR202

News Editing

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: JOUR201. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism.

Copy editing, fact checking, verification and research across media platforms, including social, with consideration of story play and placement, graphic principles, headlines and SEO.

0101	Brian Cleveland TuTh 5:00pm - 6:50pm	Seats (Total: 18) KNI 2103
0201	Lisa Lednicer TuTh 2:00pm - 3:50pm	Seats (Total: 18) KNI 2105
0301	Jay Goldman TuTh 7:00pm - 8:50pm	Seats (Total: 18) KNI 2105

JOUR203

Introduction to Multimedia Skills

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: JOUR201. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism.

Credit only granted for: JOUR203 or JOUR328G. Formerly: JOUR328G.

Examining the basics of producing and editing digital photos, video, and audio. Topics include: framing, lighting, and other aspects of composition; sequencing, using wide, medium, and tight shots; and ethical considerations when collecting sound and visuals.

0201	Timothy Jacobsen F 12:00pm - 2:45pm	Seats (Total: 1) KNI 2107
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JOUR262

News Videography

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in JOUR201. Jointly offered with: JOUR603. Credit only granted for: JOUR262 or JOUR603.

Introduction to shooting, editing and production of video stories for broadcast and the Web; includes newsgathering in the field.

0101	Benjamin Worsley TuTh 7:00pm - 8:50pm	Seats (Total: 12) TWS 0222B
0201	Timothy Doane MW 10:00am - 11:50am	Seats (Total: 12) TWS 0222A
0301	Alanna Delfino TuTh 7:00pm - 8:50pm	Seats (Total: 12) TWS 0222A
0401	Bethany Swain MW 12:00pm - 1:50pm	Seats (Total: 5) TWS 0222B
0501	Bethany Swain MW 2:00pm - 3:50pm	Seats (Total: 8) TWS 0222B

JOUR289E

Media Law and Ethics in the Digital Age

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, SCIS

This course is intended for non-journalism majors. Explore the First Amendment, libel, privacy, FOIA and copyright as they have evolved in the digital news age of bloggers, tweeters and citizen journalists. The course will cover fundamental legal and ethical concepts as well as practical application.

0101	Deborah Nelson Class time/details on ELMs	Seats (Total: 70) ONLINE
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JOUR289F

Beyond Facebook: How Social Media are Transforming Society, Culture, Business and Politics

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: IE General Education: DSHU, SCIS

Examining the rise of social media and their impact on culture, business, government, politics, journalism and society, this course provides students with a broad contextual understanding of the multidisciplinary impacts of social media such as Twitter, Facebook and similar Internet-based services.

0101	Robin Sundaramoorthy MW 11:00am - 12:15pm	Seats (Total: 35) TYD 1108
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(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in JOUR152; and minimum grade of C- in JOUR201; and must have completed or be concurrently enrolled in JOUR262 or JOUR370.

Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism.

Principles and practices of news reporting; covering news beats and other news sources, including researching news stories for accuracy, comprehensiveness and interpretation. Due to rigorous publication requirement, plan your schedule accordingly.

0101	Jerry Zremski MW 8:00am - 9:50am	Seats (Total: 18) KNI 2103
0201	David Lightman TuTh 8:00am - 9:50am	Seats (Total: 18) KNI 2105
0301	Marissa Lang TuTh 7:00pm - 8:50pm	Seats (Total: 18) KNI 2103
0401	Ed Waldman MW 7:00pm - 8:50pm	Seats (Total: 18) KNI 1101
0501	John Hughes MW 5:45pm - 7:35pm	Seats (Total: 18) KNI 2107
0601	Clarence Williams TuTh 11:30am - 1:20pm	Seats (Total: 16) KNI 2107

JOUR325

Capital News Service Bureau

(Perm req)

Credits: 9

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP

Prerequisite: JOUR320; and permission of JOUR-Philip Merrill College of Journalism.

Advanced journalism training. Students report as part of college's Capital News Service program.

Jointly offered with JOUR625. Students must contact the instructor for permission to register.

0101	James Carroll Contact instructor or department for details. <i>This section meets in the National Press Building, Washington, DC.</i>	Seats (Total: 9)
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0201	Karen Denny	Seats (Total: 9)
	Contact instructor or department for details.	
	<i>This section meets in the CNS Bureau, Annapolis, MD.</i>	
0301	Adam Marton	Seats (Total: 9)
	Contact instructor or department for details.	

JOUR327

Urban Affairs Reporting

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSSP

Prerequisite: JOUR320; and permission of instructor. Jointly offered with JOUR627. Credit only granted for: JOUR327 or JOUR627.

Students are immersed in coverage of issues affecting cities, working on a semester-long multi-platform reporting project based in Baltimore.

Students will use Baltimore as a working laboratory to report on urban issues. Course meets in Baltimore.

0101	Sandra Banisky	Seats (Total: 7)
	M 1:45pm - 4:30pm	Location: TBA

JOUR328F

Special Topics in News Writing and Reporting; National Security Issues and Investigations

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Advanced training and practice in writing and reporting news.

Prerequisite: JOUR320; Credit granted for: JOUR328F, JOUR328N or JOUR462 . Students will learn to research and report on select U.S. agencies, on bilateral relations, on Washington's many national security resources, and on press freedom problems overseas.

0101	Dana Priest	Seats (Total: 8)
	M 2:30pm - 5:15pm	KNI 3200

JOUR352

Interactive Design and Development

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: JOUR152; and JOUR201; and must have completed or be concurrently enrolled in JOUR262 or JOUR370. Or permission of JOUR-Philip Merrill College of Journalism. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism. Jointly offered with JOUR652. Credit only granted for: JOUR352 or JOUR652.

Conceptualize, wireframe, design and build responsive Web pages using HTML, style sheets and other coding tools; work with open source interactive tools, JavaScript libraries, multimedia and text to create charts, timelines, maps and other forms of nonfiction storytelling.

0201	Alexander Pyles TuTh 5:00pm - 6:50pm	Seats (Total: 18) KNI 2105
0301	Kalani Gordon Tu 6:30pm - 9:15pm	Seats (Total: 18) KNI 1101
0401	Brittany Mayes W 8:00am - 10:45am	Seats (Total: 18) KNI 1101
0501	Gagan Nirula Th 7:00pm - 9:45pm	Seats (Total: 17) KNI 1101
0601	Adam Marton W 12:00pm - 2:45pm	Seats (Total: 1) KNI 1101

JOUR353

(Perm req)

News Bureau: Multimedia Reporting

Credits: 6

Grading Method: Regular,
Audit

General Education: DSSP

Prerequisite: JOUR352; and permission of JOUR-Philip Merrill College of Journalism; and (JOUR320 or JOUR360).

Advanced reporting and writing in an online environment focusing on multimedia, non-traditional storytelling and investigative reporting.

0201	Karen Denny Contact instructor or department for details. <i>This section is for students in the Annapolis bureau.</i>	Seats (Total: 7)
0301	James Carroll Contact instructor or department for details. <i>This section is for students in the Washington, D.C. bureau.</i>	Seats (Total: 7)

0401	Deborah Nelson	Seats (Total: 7)
	Contact instructor or department for details.	
	<i>This section is for students in the Investigative Reporting bureau.</i>	
0501	Thomas Bettag	Seats (Total: 7)
	Contact instructor or department for details.	
	<i>This section is for students in the Field Producing bureau.</i>	

JOUR355 News Bureau: Multimedia Editing and Production

(Perm req)

Credits: 6 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: JOUR320 or JOUR360; and JOUR352; and permission of JOUR-Philip Merrill College of Journalism.

Advanced online journalism training. Students work as multimedia and social media editors and producers, building interactive content and special reports.

0101	Adam Marton	Seats (Total: 10)
	Contact instructor or department for details.	

JOUR357 Capital News Service Broadcast Immersion

(Perm req)

Credits: 6 Grading Method: Regular, Audit

Prerequisite: JOUR361; and permission of JOUR-Philip Merrill College of Journalism.

Advanced broadcast journalism training. Students report as part of the College's Capital News Service program.

0101	Mel Coffee	Seats (Total: 6)
	Contact instructor or department for details.	

JOUR360 News Writing and Reporting II: Broadcast

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Minimum grade of C- in JOUR201. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism.

Writing and reporting for broadcast media: production of news stories.

0101	Janet Terry TuTh 2:00pm - 3:15pm	Seats (Total: 18) KNI 2107
0301	Stuart Schwartz MW 12:30pm - 1:45pm	Seats (Total: 18) KNI 2107
0401	Elizabeth Feldman TuTh 10:00am - 11:15am	Seats (Total: 18) KNI 1101

JOUR361 Television Reporting and Production

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: JOUR262 and JOUR360.

Writing and editing for the broadcast media. Interpretive and documentary news stories.

Due to rigorous fieldwork requirement, plan your schedule accordingly.

0301	Peter Muntean TuTh 7:30pm - 9:20pm	Seats (Total: 10) KNI 3210
0401	Adam Longo M 12:00pm - 1:50pm W 12:00pm - 1:50pm	Seats (Total: 12) KNI 1101 KNI 2103
0501	Joseph Bohannon TuTh 10:00am - 11:50am	Seats (Total: 12) TWS 0222B

JOUR362 Broadcast News Producing

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: JOUR262 and JOUR360; and must have completed or be concurrently enrolled in JOUR361.

Producing TV news.

0102	Cindy Wright Tu 7:15pm - 9:15pm Tu 2:00pm - 6:50pm	Seats (Total: 2) TWS 0117 TWS 0117 Lab
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0103	Cindy Wright	Seats (Total: 1)	
	Tu 7:15pm - 9:15pm	TWS 0117	
	W 2:00pm - 6:50pm	TWS 0117	Lab
0104	Cindy Wright	Seats (Total: 2)	
	Tu 7:15pm - 9:15pm	TWS 0117	
	Th 2:00pm - 6:50pm	TWS 0117	Lab

JOUR364

Radio Broadcasting

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: JOUR360; and permission of JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR364 or JOUR368R. Formerly: JOUR368R.

Students receive hands-on training in applying what they have learned about news reporting to the preparation of stories for, and the production of, a weekly radio program.

0101	Robert Little	Seats (Total: 10)	
	W 5:30pm - 8:15pm	TWS 0222B	

JOUR367

Broadcast News Bureau

(Perm req)

Credits: 9

Grading Method: Regular,
Audit

General Education: DSSP

Prerequisite: JOUR361; and permission of JOUR-Philip Merrill College of Journalism.

Advanced broadcast journalism training. Students report as part of the college's Capital News Service program.

Jointly offered with JOUR667.

0101	Mel Coffee	Seats (Total: 15)	
	Contact instructor or department for details.		

JOUR368Y

Topics in Broadcast and Electronic Media; Sports Producing

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Advanced research, analysis and/or practice of selected topics in broadcast journalism.

Prerequisite: JOUR262 and JOUR360; or JOUR320. This class will take an analytical look at sports TV and sports content by deconstructing shows. We will examine the producer's role in creating the look, feel and direction of shows and learn how to choose a lead story, how to "tease" effectively and the importance of identifying and telling good stories. We will watch live televised sporting events to better understand the techniques used by directors and producers. Students will get hands-on experience with BTN2GO and learn all aspects of live game production.

0101	Joseph Yasharoff	Seats (Total: 12)
	W 7:00pm - 9:45pm	KNI 2103

JOUR370

Photojournalism

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in JOUR201. Restriction: Permission of JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR 368P, JOUR 370 or JOUR 670. Formerly: JOUR 368P. Additional information: Students are required to borrow, rent or purchase a 35mm digital camera. Contact department for camera specifications.

Examining the basics of shooting, editing and storytelling with still photos taken with 35mm digital cameras. Students shoot portraits, feature photos and action shots. Final project is a photo story/essay.

0101	Timothy Jacobsen	Seats (Total: 12)
	F 9:00am - 11:45am	KNI 2107
0201	Jonathan Sham	Seats (Total: 12)
	M 7:00pm - 9:45pm	KNI 2103
0301	Timothy Jacobsen	Seats (Total: 12)
	W 4:00pm - 6:45pm	KNI 1101
0501	Jaclyn Borowski	Seats (Total: 12)
	Th 5:00pm - 7:45pm	KNI 2107
0601	Jon Soucy	Seats (Total: 12)
	M 4:00pm - 6:45pm	KNI 1101
0701	Sora Devore	Seats (Total: 12)
	W 7:00pm - 9:45pm	KNI 2105

JOUR371

Feature Writing

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: JOUR320.

Research and writing feature articles.

0101	DeNeen Brown	Seats (Total: 17)
	MW 11:30am - 12:45pm	KNI 2105

JOUR382

Sports Writing and Reporting

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: JOUR320; and permission of JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR328B or JOUR382. Formerly: JOUR328B.

Gives students full and wide-ranging instruction in all aspects of sports reporting and writing, including how to report, write, edit and lay out sports stories, incorporating photography and multimedia. We will also discuss ethics, objectivity, fairness and the future of sports journalism.

0101	George Solomon	Seats (Total: 15)
	M 12:00pm - 2:45pm	KNI 1206

JOUR396

Supervised Internship

(Perm req)

Credits: 2

Grading Method: Regular

Prerequisite: Must have earned a grade of C- or better in JOUR320. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR326, JOUR366, or JOUR396.

Students will complete a minimum of 90 hours in a supervised journalism internship over a minimum of 10 weeks in spring and fall, and eight weeks in summer. Emphasis is on relating academic training to professional experience. Students may pick up an internship proposal form in KNI 1100, have their internship supervisor fill it out, and meet with the college's internship director to receive permission to register. No requests to register after the Schedule Adjustment Period will be granted. This requirement would affect incoming freshmen from the fall 2012 class.

0101	Adrianne Flynn	Seats (Total: 45)
	Contact instructor or department for details.	

JOUR398

Independent Study

(Perm req)

Credits: 1-3

Grading Method: Regular

Individual projects in journalism.

Contact department for information to register for this course.

JOUR400 Media Law

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: JOUR320, JOUR360, or JOUR501. Restriction: Junior standing or higher.

Legal rights and constraints of mass media; libel, privacy, copyright, monopoly, contempt, and other aspects of the law applied to mass communication. Previous study of the law not required.

Restricted to students having earned at least 60 credits.

0101	Deborah Nelson	Seats (Total: 52)
	M 4:00pm - 5:15pm	KNI 1208
	Class time/details on ELMs	ONLINE
0201	Sandra Banisky	Seats (Total: 43)
	TuTh 11:00am - 12:15pm	KNI 3202

JOUR452 Women in the Media

Credits: 3 Grading Method: Regular, , D General Education: DVUP
Pass-Fail, Audit

Cross-listed with WMST452. Credit only granted for: JOUR452 or WMST452.

Participation and portrayal of women in the mass media from colonial to contemporary times.

0101	Renee Poussaint	Seats (Total: 30)
	TuTh 4:00pm - 5:15pm	KNI 3202

JOUR453 News Coverage of Racial Issues

Credits: 3 Grading Method: Regular, , D General Education: DVUP
Pass-Fail, Audit

Restriction: Junior standing or higher.

Analysis of news media coverage of issues relating to racial minorities in the United States, with special attention to Hispanics, Asian Americans, African Americans and Native Americans.

Jointly offered with AASP 499N.

0101	Anne Rosen	Seats (Total: 25)
	TuTh 9:30am - 10:45am	KNI 3202

JOUR455**Media Entrepreneurship**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: JOUR459E or JOUR455. Formerly: JOUR459E.

Basic business and entrepreneurship concepts will be covered and will explore how technology is transforming the business of media. Students develop and pitch ideas for media businesses, learn startup basics, do exercises in Internet advertising and business plan analysis, use social networks and other digital communication tools, and perform other hands-on exercises in business development and presentation.

0101	Constance Ford	Seats (Total: 18)
	W 12:00pm - 2:45pm	KNI 1206

JOUR456**Literature in Journalism**

Credits: 3 Grading Method: Regular, General Education: DSHU
Pass-Fail, Audit

Credit only granted for: JOUR456 or JOUR673.

From Truman Capote's In Cold Blood to Mark Bowden's Black Hawk Down, students will examine how literary works can help writers approach a subject in a different way than more traditional forms of journalism, including the advantages and limitations of the style.

0101	Christopher Hanson	Seats (Total: 18)
	Tu 4:15pm - 7:00pm	KNI 1206
0201	Miranda Kennedy	Seats (Total: 18)
	W 7:00pm - 9:45pm	KNI 1206
0301	Kevin Klose	Seats (Total: 18)
	TuTh 11:00am - 12:15pm	KNI 1206

JOUR458B**Special Topics in Journalism; Sports Media Today**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Issues of special concerns and current interest.

Students will discuss working with various organizations' communications/media relations staff, coaches and players; distributing news of the organizations; and creating/maintaining methods for disseminating the news to the public in an honest and forthright manner. Also, traditional, digital and social media elements will be explored. Restriction: Junior Standing or higher.

0101	Rose DiPaula	Seats (Total: 26)
	W 9:00am - 11:45am	SPH 0307

JOUR458M Special Topics in Journalism; Sports, Protest, and the Media

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Issues of special concerns and current interest.

This class will examine the development of our games, the history of of remonstrations upon them and the machinations of media at the intersection of the two. It will answer why activists, whether athletes or not, have long commanded ceremonial and ritualistic games to promote a cause or take a stand. It will examine how important the role is of media as a collector, editor, interpreter, and disseminator of information, or news, about athletic competitions, athletes, and political pronouncements revolving around athletic events and their participants.

0101	Kevin Blackistone	Seats (Total: 15)
	MW 10:00am - 11:15am	KNI 1206

JOUR459F Special Topics in Journalism; Media in War and Crisis

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Issues of special concern and current interest. Open to all students.

Contact department for information to register for this course.

JOUR459K Special Topics in Journalism; Global Media and International Journalism in the 21st Century

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Issues of special concern and current interest. Open to all students.

Contact department for information to register for this course.

JOUR459L Special Topics in Journalism; European Mass Media

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Issues of special concern and current interest. Open to all students.

Contact department for information to register for this course.

JOUR459T Special Topics in Journalism; Censorship, Fake News and Disinformation

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Issues of special concern and current interest. Open to all students.

The Internet delivered us to this historic place, as did the democratic aspirations of people around the world and the powerful, authoritarian reactions against those instincts and movements. In every nation on Earth where the government is moving from a participatory to a more authoritarian form of rule, seizing control of information is a prerequisite to staying in power. We will examine the global struggle for press freedom and the rise of fake news and disinformation in Russia , the Baltics, Eastern Europe, the Middle East, Europe, the United States and elsewhere.

0101	Dana Priest	Seats (Total: 15)
	M 9:45am - 12:30pm	KNI 3200

JOUR459V Special Topics in Journalism; Media and International Affairs

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Issues of special concern and current interest. Open to all students.

Contact department for information to register for this course.

JOUR472 Data Journalism

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: JOUR320 or JOUR360. Jointly offered with JOUR772. Credit only granted for: JOUR472 or JOUR772.

A practical, skills-based course in the basics of modern data journalism, data analysis and data storytelling. Students will learn to use data programming, statistical analysis, visualization tools and investigative reporting techniques to unearth key facts, patterns and proof in storytelling.

Students must contact Assistant Dean Josh Madden for permission to register.

0101	Sean Mussenden	Seats (Total: 11)
	Tu 11:30am - 1:50pm	KNI 1101
	Class time/details on ELMs	ONLINE Lab

JOUR479I Special Topics in Data Gathering and Analysis; Seeing- Media, Images & Design

(Perm req)

Credits: 3 Grading Method: Regular

Special research topics for reporting and writing.

Prerequisite: A university statistics course. This course will introduce students to the expanding ways the "visual" is embedded in all we do and all that we are. Students will tackle challenges of why "seeing" matters and in so doing will learn visual theory. Media have become less about words and more about sight: Students will consider the ethics and impact of images on people and politics and turn those lessons into an examination of the methods of research projects where images are the data. What do we see? What don't we see? Students will analyze and deconstruct images created by others and use those insights to inform their own creation of a culminating visual journalism research project.

0101	Susan Moeller	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	KNI 2105

JOUR4790 Special Topics in Data Gathering and Analysis; Understanding Audiences

(Perm req)

Credits: 3 Grading Method: Regular

Special research topics for reporting and writing.

Must have completed a university statistics course. As journalism evolves, it may be more important than ever to understand what were once simply called "audiences"- who they are, how they consume news, and what that engagement means for them and for society. Students will learn to think critically about news audiences and contemporary issues in audience research.

0101	Hoa Nguyen	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	KNI 2105

JOUR479V Special Topics in Data Gathering and Analysis; Computational Journalism

(Perm req)

Credits: 3 Grading Method: Regular

Special research topics for reporting and writing.

Jointly offered with JOUR779V and INST408I. Credit only granted for JOUR479V, JOUR779V, or INST408I.

0101	Naeemul Hassan	Seats (Total: 8)
	M 10:00am - 12:45pm	KNI 2103

JOUR480 Capstone Colloquium: The Business of News

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism; and junior standing or higher; and permission of JOUR-Philip Merrill College of Journalism.

Students will learn the basic news business concepts and examine how revenue and cost structures for media businesses are evolving in new directions. Topics include basic principles and concepts that drive media businesses in the Internet age, including revenue sources, dynamics of online advertising and subscriptions, mobile media strategies, user metrics, engaging audiences, and market dynamics.

0101	Joshua Davidsburg, Constance Ford	Seats (Total: 60)
	Meets August 26, 2019 - October 14, 2019	
	M 5:30pm - 7:20pm	KNI 1208
	<i>Schedule adjustment is the first week of classes only.</i>	

JOUR501 Fundamentals of Writing and Editing

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of JOUR-Philip Merrill College of Journalism.

Principles of news and feature writing. For graduate students with limited prior training or experience in journalism.

0101	Christine Harvey	Seats (Total: 16)
	TuTh 9:30am - 11:20am	KNI 2107
0201	Adrianne Flynn	Seats (Total: 17)
	TuTh 9:30am - 11:20am	KNI 2103

JOUR504 Introduction to Multimedia Skills

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Corequisite: JOUR501; or permission of instructor. Restriction: Permission of JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR504 or JOUR628G. Formerly: JOUR628G.

Examining the basics of producing and editing digital photos, video, and audio. Topics include: framing, lighting, and other aspects of composition; sequencing, using wide, medium, and tight shots; and ethical considerations when collecting sound and visuals.

0101	Graham Cullen	Seats (Total: 13)
	Tu 3:30pm - 6:15pm	KNI 1101
0201	Timothy Jacobsen	Seats (Total: 12)
	F 12:00pm - 2:45pm	KNI 2107

(Perm req)

Prerequisite: Permission of JOUR-Philip Merrill College of Journalism.

Survey and evaluation of current communication theories. Attention is given to the nature and function of scientific theory, models of communication behavior, the nature of information, social functions of journalism and public communication, attitude change and persuasive communication and theories of language and meaning.

0101	Linda Steiner	Seats (Total: 9)
	W 1:00pm - 3:45pm	KNI 2109

(Perm req)

Prerequisite: JOUR504; and permission of Journalism College required. Restriction: Permission of JOUR-Philip Merrill College of Journalism. Jointly offered with JOUR262. Credit only granted for: JOUR503 or JOUR603. Formerly: JOUR503.

Introduction to shooting, editing and production of video stories for broadcast and the Web; includes newsgathering in the field.

0401	Bethany Swain	Seats (Total: 7)
	MW 12:00pm - 1:50pm	TWS 0222B
0501	Bethany Swain	Seats (Total: 4)
	MW 2:00pm - 3:50pm	TWS 0222B

(Perm req)

Restriction: Permission of JOUR-Philip Merrill College of Journalism; and must not have completed JOUR504. Credit only granted for: JOUR 604, JOUR504, or JOUR628G. Formerly: JOUR628G. Additional information: This course is for students enrolled in graduate certificate programs in the College of Journalism.

Examine the basics of producing and editing digital photos, video and audio for news. Topics include framing, lighting and other aspects of composition; sequencing, using wide, medium and tight shots; and ethical considerations when collecting sound and visuals.

PCJ1	Jennifer Rynda, Shanaz Baksh	Seats (Total: 15)
	Sa 8:30am - 12:15pm	KNI 1101
<i>Must be in MultiMedia Journalism program. For permission to enroll, contact oes@umd.edu.</i>		

JOUR610 Seminar in Mass Media History

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: JOUR610 or JOUR710. Formerly: JOUR710.

Analysis and discussion of the interrelationships between the mass media and society, including various social and cultural elements of modern society; responsibilities of the mass media and the mass communicator.

0101	Mark Feldstein	Seats (Total: 9)
	M 2:15pm - 5:00pm	KNI 2109

JOUR620 Public Affairs Reporting

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: JOUR501; or permission of JOUR-Philip Merrill College of Journalism.

Designed to add to and sharpen the skills learned in JOUR501. It is primarily an introduction to "beat" reporting that allows students to sample the most common new beats while reporting and writing on deadline. Students are required to develop and hone their multimedia skills by reporting in a variety of media.

0601	Clarence Williams	Seats (Total: 2)
	TuTh 11:30am - 1:20pm	KNI 2107

JOUR625 Advanced Capital News Service Bureau

(Perm req)

Credits: 6 Grading Method: Regular,
Audit

Prerequisite: JOUR620; and permission of JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR625 or JOUR729. Formerly: JOUR729.

Advanced journalism training. Students report as part of College's Capital News Service program.

0101	James Carroll	Seats (Total: 10)
Contact instructor or department for details.		

0201	Karen Denny	Seats (Total: 10)
	Contact instructor or department for details.	

JOUR627

Urban Affairs Reporting

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: JOUR501; and permission of JOUR-Philip Merrill College of Journalism. Corequisite: JOUR620; or permission of JOUR-Philip Merrill College of Journalism. Jointly offered with JOUR327. Credit only granted for: JOUR327 or JOUR627.

Students are immersed in coverage of issues affecting cities, working on a semester-long multi-platform reporting project based in Baltimore.

Students will use Baltimore as a working laboratory to report on urban issues. Course meets in Baltimore.

0101	Sandra Banisky	Seats (Total: 6)
	M 1:45pm - 4:30pm	Location: TBA

JOUR628B

Specialized Topics in News Writing and Reporting; Sports Reporting and Writing

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Advanced training and practice in writing and reporting news. Repeatable to a maximum of six credits provided the content differs.

Course shares space with JOUR382. This course is designed to give students a full and wide-ranging experience in all aspects of sports journalism, including multimedia, social media, the history of the craft and other specialties in reporting, investigative journalism, writing, layout, game coverage and editing.

0101	George Solomon	Seats (Total: 3)
	M 12:00pm - 2:45pm	KNI 1206

JOUR628N

Specialized Topics in News Writing and Reporting; National Security Issues and Investigations

Credits: 3 Grading Method: Regular,
Audit

Advanced training and practice in writing and reporting news. Repeatable to a maximum of six credits provided the content differs.

Prerequisite: JOUR620. Students will learn to research and report on select U.S. agencies, on bilateral relations, on Washington's many national security resources, and on press freedom problems overseas.

0101	Dana Priest	Seats (Total: 1)
	M 2:30pm - 5:15pm	KNI 3200

JOUR652 Interactive Design and Development

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Corequisite: Offered to students enrolled in the journalism master's degree or certificate. Master's degree students should take JOUR 504 as a pre- or co-requisite. Certificate students are encouraged to take JOUR 604 as a co-requisite. Restriction: Must be in a major in JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR652 or JOUR352.

Conceptualize, wireframe, design and build responsive Web pages using HTML, style sheets and other coding tools; work with open source interactive tools and JavaScript libraries to create charts, timelines and maps to tell stories.

0201	Adam Marton	Seats (Total: 13)
	W 12:00pm - 2:45pm	KNI 1101
0301	Gagan Nirula	Seats (Total: 1)
	Th 7:00pm - 9:45pm	KNI 1101
0401	Matthew Callahan	Seats (Total: 13)
	M 8:00am - 10:45am	KNI 1101
PCJ1	Eric Falquero	Seats (Total: 15)
	Sa 1:30pm - 5:15pm	KNI 2105
	<i>Must be in MultiMedia Journalism program. For permission to enroll, contact oes@umd.edu.</i>	

JOUR655 Advanced Online News Bureau

(Perm req)

Credits: 6 Grading Method: Regular,
Audit

Prerequisite: JOUR603 or JOUR620; and (JOUR504 and JOUR652). Or permission of JOUR-Philip Merrill College of Journalism.

Advanced online journalism training. Students work as online reporters, editors and producers for a news site. Students also package copy from the print and broadcast news bureaus.

Prerequisites: JOUR 620 and 652 or equivalent. Contact the instructor to obtain permission. Course shares space with JOUR355.

0101	Adam Marton	Seats (Total: 4)
	Contact instructor or department for details.	

JOUR660

Broadcast News Writing

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: JOUR501. Credit only granted for: JOUR660 or JOUR760. Formerly: JOUR760.

Descriptive and critical analysis of broadcast news; methods of evaluation of news judgments; decision-making and organizational aspects of the broadcast news industry.

0101	Roxanne Russell	Seats (Total: 13)
	MW 10:30am - 11:45am	KNI 2107

JOUR661

Television Reporting and Production

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: JOUR603; or students who have taken courses with comparable content may contact the department. Restriction: Must not be in Journalism Studies (Doctoral) program.

Reporting, writing, editing and production of broadcast news.

0301	Peter Muntean	Seats (Total: 2)
	TuTh 7:30pm - 9:30pm	KNI 3210

JOUR662

Broadcast News Producing

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have completed or be concurrently enrolled in JOUR661; and (JOUR603 and JOUR660). Jointly offered with JOUR362. Credit only granted for: JOUR668B or JOUR662. Formerly: JOUR668B.

Learn and practice the basics of broadcast newscast producing. Design, write, edit and implement a news program.

0101	Cindy Wright	Seats (Total: 1)
	Tu 7:15pm - 9:15pm	TWS 0117
	W 2:00pm - 6:50pm	TWS 0117 Lab

Radio Broadcasting

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: JOUR501 and JOUR603; or permission of JOUR-Philip Merrill College of Journalism.

Restriction: Permission of JOUR-Philip Merrill College of Journalism.

Students apply news reporting skills to prepare and produce a weekly radio news magazine program.

0101	Robert Little	Seats (Total: 1)
	W 5:30pm - 8:15pm	TWS 0222B

JOUR667

Broadcast News Bureau

(Perm req)

Credits: 6

Grading Method: Regular,
Audit

Prerequisite: JOUR503; or students who have taken courses with comparable content may contact the department. And permission of JOUR-Philip Merrill College of Journalism.

Advanced broadcast journalism training. Students report as part of the College's Capital News Service program.

Jointly offered with JOUR367.

0101	Mel Coffee	Seats (Total: 15)
	Contact instructor or department for details.	

JOUR668F

Topics in Broadcasting and Electronic Media; Field Producing

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Advance research and analysis of selected topics in broadcast journalism.

0101	Thomas Bettag	Seats (Total: 1)
	Contact instructor or department for details.	

JOUR689F

News Coverage of Specialized Topics; Feature Writing

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Advance training and practice in writing and reporting news in on specialized field of interest.

Prerequisite: JOUR620. Research and writing feature articles.

0101	DeNeen Brown	Seats (Total: 1)
	MW 11:30am - 12:45pm	KNI 2105

JOUR698 Special Problems in Communication

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

Independent study in area of the student's interest.

Contact department for information to register for this course.

JOUR698I Special Problems in Communication; Advanced Public Affairs Reporting/Investigative Journalism

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Independent study in area of the student's interest.

Prerequisites: JOUR501. Students will learn the essentials of accountability reporting while producing a publishable, in-depth project on an issue with national significance and impact on people's lives. Substantial fieldwork, teamwork and persistence are required.

0101	Deborah Nelson	Seats (Total: 3)
	Contact instructor or department for details.	
	<i>Contact department or instructor for details.</i>	

JOUR702 Journalism Law and Ethics

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in one of the following programs (Journalism - Master (Master's); Journalism Studies (Doctoral)) ; or permission of JOUR-Philip Merrill College of Journalism. Credit only granted for: JOUR400, JOUR 600, JOUR700, or JOUR 702.

An examination of the legal rights and ethical problems and constraints of mass media, including libel, privacy, copyright, monopoly and contempt.

0101	Sandra Banisky	Seats (Total: 36)
	TuTh 2:00pm - 3:15pm	KNI 1208

JOUR772 Data Journalism

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed or be concurrently enrolled in JOUR501; or students who have taken courses with comparable content may contact the department. Credit only granted for: JOUR472 or JOUR772.

A practical, skills-based course in the basics of modern data journalism, data analysis and data storytelling. Students will learn to use data programming, statistical analysis, visualization tools and investigative reporting techniques to unearth key facts, patterns and proof in storytelling.

0101	Sean Mussenden	Seats (Total: 7)	
	Tu 11:30am - 1:50pm	KNI 1101	
	Class time/details on ELMs	ONLINE	Lab

JOUR779V Seminar in Research Problems; Computational Journalism

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Methods of research design and analysis in specialized areas of journalism and public communication research.

Jointly offered with JOUR479V or INST408I. Credit only granted for JOUR479V, JOUR779V, or INST408I.

0101	Naeemul Hassan	Seats (Total: 2)	
	M 10:00am - 12:45pm	KNI 2103	

JOUR798 Master's Professional Fieldwork

(Perm req)

Credits: 2-6 Grading Method: Sat-Fail

Research for and preparation of news articles or programs for use in the media. Analysis of fieldwork experience using communication theory and research results. Fieldwork may be done independently or as an internship. Repeatable to a maximum of six credits.

Contact department for information to register for this course.

JOUR799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

JOUR800 Introduction to Doctoral Study in Journalism and Public Communication

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: JOUR700 or JOUR800. Formerly: JOUR700.

Basic skills in journalism and public communication research.

0101	Krishnan Vasudevan	Seats (Total: 10)
	W 9:00am - 11:45am	KNI 2109

JOUR888 Doctoral Professional Field Work

Credits: 3-9 Grading Method: Regular,
Audit

Critical analysis of a phase of a professional field in journalism and public communication. Analysis of professional activity through personal observation. Evaluation of the purpose, process, effectiveness, and efficiency of professional activity. Recommendations for training and further research.

Contact department for information to register for this course.

JOUR889 Doctoral Tutorial in Journalism and Public Communication

Credits: 3-9 Grading Method: Regular,
Audit

Individual research in journalism and public communication.

Contact department for information to register for this course.

JOUR898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

JOUR899 Doctoral Dissertation Research in Journalism and Mass Communication

(Perm req)

Credits: 6 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

JWST Jewish Studies Fall 2019

JWST219C Special Topics in Jewish Studies; Contemporary Israel: History and Society

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

JWST219D Special Topics in Jewish Studies; Women in Israel

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

JWST219E Special Topics in Jewish Studies; Writing Israel

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

JWST219G Special Topics in Jewish Studies; Zionism and Sexual Revolution

Credits: 3 Grading Method: Regular, General Education: DSHU
Pass-Fail, Audit

Cross-listed with ISRL249N. Credit granted for JWST219G or ISRL249N.

0101	Shirelle Doughty	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

JWST219T Special Topics in Jewish Studies; Merchants, Rabbis and Schmaltz: The Politics of Jews and Film

Credits: 3 Grading Method: Regular, General Education: DSHU
Pass-Fail, Audit

Cross-listed with FILM298T. Credit only granted for JWST219T or FILM298T . What are the different ways Jews and Jewishness have been represented in Cinema over time? How have Jewish filmmakers used the cinematic medium to construct or deconstruct Jewish identity? Students will investigate different types of representations of Jews, asking how they operate in the context of the broader film traditions, and more.

0101	Adi Mahalel	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	SQH 1121

JWST233 Why the Jews? Historical and Cultural Investigations

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit DSHU, DVUP

Restriction: Must not have completed HIST282, HIST283, JWST234, or JWST235. Cross-listed with HIST287. Credit only granted for: JWST233 or HIST287.

Examines the history and culture of the Jews from the thirteenth century BCE/BC to the present through an examination of significant themes or problems (such as "religion" or "diaspora") that shape our understanding of the Jewish people. A primary focus in the course will be on texts, artifacts, and other cultural products by Jews and others that illustrate the history of the Jews help understand their cultural heritage.

For Fall 2018 - Cross-listed with HIST287 and RELS219D. Credit only granted for HIST287, JWST233, or RELS219D.

0101	Bernard Cooperman	Seats (Total: 24)	
	TuTh 2:00pm - 2:50pm	SQH 1120	
	W 11:00am - 11:50am	TLF 1103	Discussion
0102	Bernard Cooperman	Seats (Total: 24)	
	TuTh 2:00pm - 2:50pm	SQH 1120	
	W 12:00pm - 12:50pm	TLF 1103	Discussion
0103	Bernard Cooperman	Seats (Total: 20)	
	TuTh 2:00pm - 2:50pm	SQH 1120	
	W 2:00pm - 2:50pm	WDS 1131	Discussion

JWST281

Yiddish I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Introduction to the Yiddish language, with emphasis on speaking, reading, and writing skills. Students will also learn the history of the language, its significance to Jewish culture, its origins and basic structure.

Jointly offered with GERM148Y. Credit only granted for JWST281 or GERM14 8Y.

0101	Adi Mahalel	Seats (Total: 20)	
	TuTh 12:30pm - 1:45pm	JMZ 1205	
	Class time/details on ELMs	ONLINE	
<i>This is a Big Ten Academic Alliance Course-Share Course.</i>			

JWST289E

Civil Discourse or Urban Riot: Why Cities Don't (Often) Explode

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit DVUP, SCIS

Cross-listed with: HIST135. Credit only granted for: HIST135 or JWST289E.

An examination of the mechanisms that promote peaceful co-existence in urban societies and a discussion of how and why city streets sometimes become violent.

Jointly offered with HIST135. Credit granted for HIST135 or JWST289E.

0101	Bernard Cooperman TuTh 11:00am - 11:50am W 11:00am - 11:50am	Seats (Total: 24) TWS 0310 KEY 0100	Discussion
0102	Bernard Cooperman TuTh 11:00am - 11:50am W 12:00pm - 12:50pm	Seats (Total: 24) TWS 0310 KEY 0100	Discussion
0103	Bernard Cooperman TuTh 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 24) TWS 0310 SQH 1101	Discussion
0105	Bernard Cooperman TuTh 11:00am - 11:50am Th 5:00pm - 5:50pm <i>Restricted to students in Carillon Communities.</i>	Seats (Total: 15) TWS 0310 TWS 0205	Discussion

JWST289J

Jerusalem in Antiquity: The History of Sacred Space in a Holy City

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSHU,
DVUP, SCIS

Cross-listed with: RELS289J. Credit only granted for: JWST289J or RELS289J.

Cross-listed with RELS289J. Credit will be granted for JWST289J or RELS289J.

0101	Gregory Stoehr MW 11:00am - 11:50am W 1:00pm - 1:50pm	Seats (Total: 20) ASY 2309 ASY 3217	Discussion
0102	Gregory Stoehr MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 20) ASY 2309 WDS 1130	Discussion
0103	Gregory Stoehr MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 20) ASY 2309 WDS 0104	Discussion
0104	Gregory Stoehr MW 11:00am - 11:50am W 2:00pm - 2:50pm	Seats (Total: 20) ASY 2309 ASY 3207	Discussion

JWST319B Special Topics in Jewish Studies; Arab-Israeli Relations

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topics in Jewish Studies.

Contact department for information to register for this course.

JWST319E Special Topics in Jewish Studies; Literature of the Shoah

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topics in Jewish Studies.

Contact department for information to register for this course.

JWST325 Jews and Judaism in Antiquity I: Sixth Century BCE through the First Century CE

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit DSSP, DVUP

Cross-listed with HIST370. Credit only granted for: HIST370 or JWST325.

Political, social, and religious history of the Jews from the Persian Period to the Judean Revolt of 66-70CE. Special attention to the rise of sectarian and revolutionary movements.

0101	Hayim Lapin	Seats (Total: 40)
	MW 10:00am - 10:50am	KEY 0126
	Class time/details on ELMs	ONLINE

JWST369A Special Topics in Study Abroad III; The Holocaust: 20th Century Jewish Thought

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

JWST369R Special Topics in Study Abroad III; Italy and the Jews: History and Culture from the Renaissance to the Present

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

JWST370 Before the Holocaust: The Golden Age of Eastern European Jewry

Credits: 3

Grading Method: Regular,

Pass-Fail, Audit

General Education: DSHS,

DVUP

Credit only granted for: JWST419E, JWST370, or HIST419Q. Formerly: JWST419E.

An exploration of the history of the Jews of Eastern Europe from the period of the Polish Lithuanian Commonwealth until the Holocaust. Topics to be covered include religious, political, social, and cultural transformation of Jewish life in Eastern Europe in the context of the general political changes in the area.

Jointly offered with HIST419Q. Credit granted for JWST370 or HIST419Q.

0101	Rachel Manekin	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	SQH 1121

JWST386

Experiential Learning in Jewish Studies

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of ARHU-Meyerhoff Program & Center for Jewish Studies. Restriction: Junior standing or higher.

The Jewish Studies Program's internship program. Pre-professional experience in research, analysis, and writing related to Jewish Studies in a variety of work settings.

Students will meet with instructor for one hour per week while completing their internship.

0101	Scott Lasensky Seats (Total: 15) Contact instructor or department for details. <i>Meeting time is subject to change to accommodate student course and internship schedules.</i>
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JWST408

Honors Seminar in Jewish Studies

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

An in-depth exploration of a theme in Jewish history, literature, culture or thought. Course subject and readings will vary from year to year, but will generally cut across periods, locations, or disciplines. Students are expected to engage the course material critically and to use the seminar as an opportunity to develop an independent research agenda.

Contact department for information to register for this course.

JWST409

Research Seminar in Jewish Studies

(Perm req)

Credits: 3-4

Grading Method: Regular,
Pass-Fail, Audit

A capstone course for Jewish Studies. Guides students through advanced source material and subject matter, research skills, and presentation techniques. A substantive paper based on independent research and analysis is one expected outcome.

Contact department for information to register for this course.

JWST409A

Research Seminar in Jewish Studies; Literature and Jewish Life in Eastern Europe

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP

A capstone course for Jewish Studies. Guides students through advanced source material and subject matter, research skills, and presentation techniques. A substantive paper based on independent research and analysis is one expected outcome.

We will read and discuss literary works by different authors describing Jewish life in Eastern Europe, and examine their contribution to the myths, images, and historiography of Eastern European Jewry. Scholarly articles will help us analyze the specific historical conditions that served as background for the different literary works.

0101	Rachel Manekin	Seats (Total: 7)
	TuTh 4:00pm - 5:15pm	SQH 1123

JWST418

Honors Thesis Research in Jewish Studies

(Perm req)

Credits: 3-6

Grading Method: Regular

Guided research on a thesis under the supervision of the Jewish Studies faculty.

Contact department for information to register for this course.

JWST430

Dead Sea Scrolls

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHU,
DSSP

Prerequisite: Must have completed one JWST course or one RELS course; or permission of ARHU-Meyerhoff Program & Center for Jewish Studies. Cross-listed with RELS430. Credit only granted for: JWST430 or RELS430.

A study of the Dead Sea Scrolls in their ancient and modern settings, and in terms of contemporary scholarly interpretations of their meaning. Interpretations of the historical significance of these documents, their connections to ancient Jewish sectarian movements, and their implications for our understanding of Judaism, Christianity, and the history of the Bible.

0101	Maxine Grossman	Seats (Total: 40)
	Th 4:00pm - 6:30pm	SQH 1103

JWST459

Readings in Medieval Hebrew

(Perm req)

Credits: 3-4

Grading Method: Regular,
Pass-Fail, Audit

Readings and analysis of Hebrew texts and literature from the Middle Ages. Language of instruction in English; all texts in Hebrew.

Contact department for information to register for this course.

JWST468

Readings in the Hebrew Bible

(Perm req)

Credits: 3-4

Grading Method: Regular,
Pass-Fail, Audit

Readings in the Hebrew text of the Bible. Emphasis in close reading, grammar analysis, and modern interpretations of the Bible. Language of instruction English; all texts in Hebrew.

Contact department for information to register for this course.

JWST469

Readings in Rabbinic Hebrew

(Perm req)

Credits: 3-4

Grading Method: Regular,
Pass-Fail, Audit

Readings in classical rabbinic texts and related corpora. Emphasis on grammar and reading skills as well as critical analysis of the material. Language of instruction: English; all texts in original language.

Contact department for information to register for this course.

JWST478

Readings in Modern Hebrew

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Variable topics in Modern Hebrew Literature.

Contact department for information to register for this course.

JWST499

Independent Study in Jewish Studies; Independent Study in Jewish Studies

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: permission of department.

Contact department for information to register for this course.

JWST609**Supervised Instruction-Practicum in Jewish Studies**

(Perm req)

Credits: 1 Grading Method: Sat-Fail

Supervised instruction or supervised practicum in Jewish Studies. Intended for graduate students whose course work includes field work or classroom teaching.

Contact department for information to register for this course.

JWST619**Directed Readings in Jewish Studies**

(Perm req)

Credits: 3 Grading Method: Regular

Independent Study in Jewish Studies. Readings and papers.

Contact department for information to register for this course.

JWST648**Readings in Jewish History; Readings in Jewish History**

(Perm req)

Credits: 3 Grading Method: Regular

Focus on the central issues in Jewish history as well as the key historiographical debates on those issues.

Prerequisite: permission of department. Repeatable to 9 credits if content differs. Focus on the central issues in Jewish history as well as the key historiographical debates on those issues.

Contact department for information to register for this course.

JWST658**Readings in Jewish Thought and Culture**

(Perm req)

Credits: 3 Grading Method: Regular

Examines key issues in the development of Jewish thought and culture.

Prerequisite: permission of department. Repeatable to 9 credits if content differs. Examines key issues in the development of Jewish thought and culture.

Contact department for information to register for this course.

JWST678**Readings in Jewish Literature**

(Perm req)

Credits: 3 Grading Method: Regular

Examines selected themes or literatures in the development of Jewish literary traditions.

Prerequisite: permission of department. Repeatable to 9 credits if content differs. Examines selected themes on literatures in the development of Jewish literary traditions.

Contact department for information to register for this course.

JWST699**Independent Graduate Readings in Jewish Studies**

Credits: 1-3 Grading Method: Regular

Independent readings or guided research in a field of Jewish Studies with a member of the Jewish Studies graduate faculty.

0105	Maxine Grossman	Seats (Total: 1)
Contact instructor or department for details.		

JWST799**Masters Thesis Research**

(Perm req)

Credits: 1-6 Grading Method: Regular, Sat-Fail

Research and Writing the Masters Thesis in Jewish Studies.

Prerequisite: permission of department.

Contact department for information to register for this course.**KNES****Kinesiology****Fall 2019****KNES100N****Physical Education Activities: Coed; Basketball (Beginning)**

Credits: 1 Grading Method: Regular, Pass-Fail

Attendance is required of all students beginning the first day of class. Schedule adjustment is the first week of classes only. Students must pay a \$40 instructional materials fee.

0001	Andrew Ginsberg	Seats (Total: 32)
Meets August 26, 2019 - October 11, 2019		
TuTh 8:00am - 10:00am		ERC 0135 Lab
<i>Meets first 7 weeks.</i>		
0002	Andrew Ginsberg	Seats (Total: 32)
Meets October 14, 2019 - December 9, 2019		
TuTh 8:00am - 10:00am		ERC 0135 Lab
<i>Meets second 7 weeks.</i>		

KNES100O**Physical Education Activities: Coed; Basketball (Intermediate)**

Credits: 2 Grading Method: Regular, Pass-Fail

Attendance is required of all students beginning the first day of class. Students must pay a \$40 instructional materials fee.

0001	Mike Hamberger	Seats (Total: 32)	
	MW 12:00pm - 2:00pm	ERC 0135	Lab
0004	Timothy Henkel	Seats (Total: 32)	
	TuTh 12:00pm - 2:00pm	ERC 0135	Lab
	<i>This section is for KNES Majors only.</i>		

KNES131O Physical Education Activities: Coed; Jogging (Intermediate)

Credits: 2 Grading Method: Regular,
Pass-Fail

Students must pay a \$40 instructional materials fee. Attendance is required of all students beginning the first day of class.

0001	Timothy Henkel	Seats (Total: 40)	
	TuTh 2:00pm - 4:00pm	ARM 1122	Lab
	<i>This section is for KNES Majors only.</i>		

KNES131V Physical Education Activities: Coed; Jogging (BEGINNING)

Credits: 2 Grading Method: Regular,
Pass-Fail

Attendance is required of all students beginning the first day of class. Students must pay a \$40 instructional materials fee.

0001	Catherine Springer	Seats (Total: 40)	
	MW 2:00pm - 4:00pm	ARM 1122	Lab
0002	Sara Mascone	Seats (Total: 40)	
	TuTh 12:00pm - 2:00pm	ARM 1122	Lab

KNES134O Physical Education Activities: Coed; Bowling (Intermediate)

Credits: 1 Grading Method: Regular,
Pass-Fail

Attendance is required the first day of class. Students must pay a \$40 instructional materials fee. Bowling shoes are required (can be rented). Schedule adjustment is the first week of classes only.

Attendance is required of all students beginning the first day of class. Students must pay a \$40 instructional materials fee.

0001	Kenneth Klotz	Seats (Total: 35)	
	MW 8:00am - 10:00am	SPH 0107	Lab

KNES152N Physical Education Activities: Coed; Soccer (Beginning)

Credits: 1 Grading Method: Regular,
Pass-Fail

Schedule Adjustment Period is the first week of classes only. Students are required to attend classes beginning first day of classes. Students must pay a \$40 instructional materials fee.

0001	Emma Shaw	Seats (Total: 24)	
	Meets August 26, 2019 - October 11, 2019		
	MW 12:00pm - 2:00pm	ARM 1122	Lab
	<i>This section is for KNES Majors Only.</i>		

KNES152O Physical Education Activities: Coed; Soccer (Intermediate)

Credits: 1 Grading Method: Regular,
Pass-Fail

Attendance is required beginning the first day of class. Schedule adjustment is the first week of classes only. Students must pay a \$40 instructional materials fee.

0002	Emma Shaw	Seats (Total: 24)	
	Meets October 14, 2019 - December 9, 2019		
	MW 12:00pm - 2:00pm	ARM 1122	Lab

KNES154N Physical Education Activities: Coed; Swimming (Beginning)

Credits: 1 Grading Method: Regular,
Pass-Fail

Beginning Swimming is strictly for Non-swimmers. Attendance is required on the first day of class. Students must pay a \$40 instructional materials fee.

0001	Natalie Taylor	Seats (Total: 22)	
	MW 12:00pm - 1:15pm	ERC B0120	Lab

KNES154O Physical Education Activities: Coed; Swimming (Intermediate)

Credits: 1 Grading Method: Regular,
Pass-Fail

Attendance on the first day of class is required of all students. Students must pay a \$40 instructional materials fee.

0001	Stephanie Draminski	Seats (Total: 22)	
	TuTh 1:00pm - 2:15pm	ERC B0120	Lab
<i>This section is for KNES Majors only.</i>			

KNES154W Physical Education Activities: Coed; Swimming/Lifeguard Training

Credits: 2 Grading Method: Regular,
Pass-Fail

Prerequisite: Advanced swimming ability. Attendance on the first day of class is required of all students. Students must qualify to stay in class by passing a swim test on the first day of class. Students must pay a \$40 instructional materials fee.

0001	Ronald Willoughby	Seats (Total: 22)	
	MW 10:00am - 12:00pm	ERC B0120	Lab

KNES155N Physical Education Activities: Coed; Tennis (Beginning)

Credits: 1 Grading Method: Regular,
Pass-Fail

Attendance is required of all students on the first day of class. Students must pay a \$40 instructional materials fee.

0001	Katherine Kim	Seats (Total: 32)	
	Meets August 26, 2019 - October 11, 2019		
	MW 10:00am - 12:00pm	ERC 0135	Lab
<i>This section is for KNES Majors Only.</i>			
0002	Wontak Kim	Seats (Total: 32)	
	Meets August 26, 2019 - October 11, 2019		
	MW 12:00pm - 2:00pm	ERC 0135	Lab
<i>This section is for KNES Majors Only.</i>			

0003	Wontak Kim	Seats (Total: 32)	
	Meets August 26, 2019 - October 11, 2019		
	MW 2:00pm - 4:00pm	ERC 0135	Lab

KNES157N Physical Education Activities: Coed; Weight Training (Beginning)

Credits: 1 Grading Method: Regular,
Pass-Fail

Attendance is required of all students beginning the first day of class. Students must pay a \$40 instructional materials fee.

0001	Steven Kahl	Seats (Total: 28)	
	MW 10:00am - 11:15am	SPH 0103	Lab
0002	Monica Nelson	Seats (Total: 28)	
	MW 1:00pm - 2:15pm	SPH 0103	Lab
0003	Timothy Henkel	Seats (Total: 28)	
	MW 2:00pm - 3:15pm	SPH 0103	Lab
0004	Katherine Kim	Seats (Total: 28)	
	TuTh 9:30am - 10:45am	SPH 0103	Lab
0005	Laura Rush	Seats (Total: 28)	
	TuTh 2:00pm - 3:15pm	SPH 0103	
FC01	Mike Hamberger	Seats (Total: 28)	
	TuTh 3:00pm - 4:15pm	SPH 0103	Lab
<i>Restricted to students in Freshman Connection.</i>			

KNES157O Physical Education Activities: Coed; Weight Training (Intermediate)

Credits: 1 Grading Method: Regular,
Pass-Fail

Attendance on the first day of class is required of all students. Students must pay a \$40 instructional materials fee.

0001	James Heilman	Seats (Total: 28)	
	MW 11:00am - 12:15pm	SPH 0103	Lab
<i>This section is for KNES Majors only.</i>			

0002	James Heilman	Seats (Total: 28)		
	MW 12:00pm - 1:15pm	SPH 0103	Lab	
	<i>This section is for KNES Majors only.</i>			
0003	Monica Nelson	Seats (Total: 28)		
	TuTh 12:00pm - 1:15pm	SPH 0103	Lab	
	<i>This sections is for KNES Majors only.</i>			

KNES160N Physical Education Activities: Coed; Volleyball (Beginning)

Credits: 1 Grading Method: Regular,
Pass-Fail

Schedule Adjustment Period is first week of class only. Attendance is required of all students on the first day of class. Students must pay a \$40 instructional materials fee.

0001	Gina Garcia	Seats (Total: 32)		
	Meets October 14, 2019 - December 9, 2019			
	MW 10:00am - 12:00pm	SPH 2101	Lab	
	<i>This section is for KNES Majors Only.</i>			

KNES160O Physical Education Activities: Coed; Volleyball (Intermediate)

Credits: 1 Grading Method: Regular,
Pass-Fail

Schedule Adjustment Period is the first week of class only. All students are required to attend the first day of class. Students must pay a \$40 instructional materials fee.

0001	Gina Garcia	Seats (Total: 32)		
	Meets October 14, 2019 - December 9, 2019			
	MW 12:00pm - 2:00pm	SPH 2101	Lab	
	<i>This section is for KNES Majors only.</i>			
0002	Andrea Romeo	Seats (Total: 32)		
	Meets October 14, 2019 - December 9, 2019			
	TuTh 2:00pm - 4:00pm	SPH 2101	Lab	
	<i>This section is for KNES Majors only.</i>			

KNES161F

Credits: 1

Attendance on the first day of class is required. Students must pay a \$40 instructional materials fee.

0001	Laura Rush	Seats (Total: 36)	
	TuTh 3:00pm - 4:15pm	SPH 0107	Lab
	<i>This section is for KNES Majors only.</i>		

KNES161T

Credits: 1

0001	Kate Shin Meets August 26, 2019 - October 11, 2019 TuTh 11:00am - 1:00pm	Seats (Total: 30) SPH 0107
0002	Kate Shin Meets October 14, 2019 - December 9, 2019 TuTh 11:00am - 1:00pm	Seats (Total: 30) SPH 0107

KNES200

Credits: 3

Restriction: Must be in Kinesiology program; and freshman standing. Or must not be in Kinesiology program; and must have less than 60 credits. Credit only granted for: KNES200 or KNES289M.

An overview of kinesiology, the interdisciplinary study of physical activity. Examines human motor behavior and its cultural forms such as sport from the physiological, psychological, sociological, historical, philosophical, and biomechanical perspectives.

0101	Andrew Ginsberg, Andrea Romeo	Seats (Total: 80)
	TuTh 11:00am - 12:15pm	SPH 1312

KNES201

Credits: 1

Corequisite: Any physical activity course, e.g., KNES 100-190; or permission of SPHL-Kinesiology department. Restriction: Must be in a major in SPHL-School of Public Health. Credit only granted for: KNES200 or KNES201.

An introduction to Kinesiology, the study of human movement, through the experience of learning a specific motor skill or being engaged in physical activity. Emphasis on the theories and knowledge underlying the learning and performance of all motor and sport skills.

KNES Majors Only.

0101	Andrea Romeo Meets August 26, 2019 - October 12, 2019 M 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 25) SPH 0308 ONLINE
0102	Andrea Romeo Meets October 14, 2019 - December 9, 2019 M 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 25) SPH 0308 ONLINE
0103	Andrew Ginsberg Meets August 26, 2019 - October 12, 2019 W 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 25) SPH 0303 ONLINE
0105	Anna Posbergh Meets August 26, 2019 - October 12, 2019 M 2:00pm - 2:50pm Class time/details on ELMs	Seats (Total: 25) SPH 0307 ONLINE
0106	Anna Posbergh Meets October 14, 2019 - December 9, 2019 M 2:00pm - 2:50pm Class time/details on ELMs	Seats (Total: 25) SPH 0307 ONLINE

0109	Tori Thompson	Seats (Total: 25)
	Meets August 26, 2019 - October 12, 2019	
	M 3:00pm - 3:50pm	SPH 0307
	Class time/details on ELMs	ONLINE
0110	Tori Thompson	Seats (Total: 25)
	Meets October 14, 2019 - December 9, 2019	
	M 3:00pm - 3:50pm	SPH 0307
	Class time/details on ELMs	ONLINE

KNES214

Science and Methods of Personal Fitness Instruction

Credits: 3

Grading Method: Regular

General Education: DSSP

Credit only granted for: KNES214 or KNES210 and KNES211, or KNES210 and KNES212, or KNES289N. Formerly: KNES210/KNES211, KNES210/KNES212, and KNES289N.

Basic concepts of human anatomy, exercise physiology, applied kinesiology, nutrition and the physiology of exercise training. Includes the CORE knowledge required for the American Council on Exercise (ACE) Personal Trainer certification.

0101	Rosemary Lindle	Seats (Total: 25)
	Class time/details on ELMs	ONLINE
	M 8:00am - 10:00am	SPH 0305 Lab
0102	Rosemary Lindle	Seats (Total: 25)
	Class time/details on ELMs	ONLINE
	W 8:00am - 10:00am	SPH 0303 Lab

KNES222

Gambling in the New Millennium: Poker, The Preakness, Point-spreads, Powerball and Public Policy

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHS,
SCIS

Recommended: ENGL101 and COMM107.

Is gambling in the public interest? Students will critically examine the various implications of "what it means to gamble" through investigations of various gambling forms, different sectors of the gambling industry and the related economics, along with consumer behavior, sport, public policy and public health in this context.

0101	Stephen McDaniel MW 2:00pm - 2:50pm F 9:00am - 9:50am	Seats (Total: 20) PLS 1140 SPH 1303	Discussion
0102	Stephen McDaniel MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 20) PLS 1140 SPH 1303	Discussion
0103	Stephen McDaniel MW 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 20) PLS 1140 SPH 1303	Discussion
0104	Stephen McDaniel MW 2:00pm - 2:50pm F 12:00pm - 12:50pm	Seats (Total: 20) PLS 1140 SPH 1303	Discussion

KNES260

Science of Physical Activity and Cardiovascular Health

Credits: 3 Grading Method: Regular, Pass-Fail CORE: LS General Education: DSNS

Course details (1) the public health importance of and the processes underlying cardiovascular disease, (2) the risk factors for cardiovascular disease and the methods whereby they were identified, and (3) the principles of the scientific evidence supporting the use of physical activity to prevent cardiovascular disease.

0101	James Hagberg MW 12:00pm - 12:50pm M 9:00am - 9:50am	Seats (Total: 20) ATL 2324 SPH 0125	Discussion
0103	James Hagberg MW 12:00pm - 12:50pm M 10:00am - 10:50am	Seats (Total: 20) ATL 2324 SPH 0125	Discussion

KNES282

Basic Care and Prevention of Athletic Injuries

Credits: 3 Grading Method: Regular, Pass-Fail

Restriction: Must be in a major within the SPHL-Kinesiology department. Credit only granted for: KNES282 or KNES381.

Theoretical and practical foundations of the prevention, treatment and rehabilitation of athletically related injuries. Topics include: physical conditioning, preventive taping, recognition of injuries, first aid and CPR.

KNES Majors only.

0101	Joanne Klossner	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	SPH 0308
<i>This section is for KNES Majors Only.</i>		

KNES287

Sport and American Society

Credits: 3 Grading Method: Regular, Pass-Fail CORE: SB, D General Education: DSHS, DVUP

Sport will be related to such social problems as delinquency, segregation, collective behavior, and leisure; to social processes such as socialization, stratification, mobility, and social control; and to those familiar social institutions the family, the school, the church, the military, the economy, the polity, and the mass media.

0101	David Andrews	Seats (Total: 22)
	MW 2:00pm - 2:50pm	SPH 1312
	M 8:00am - 8:50am	SPH 0303 Discussion
0102	David Andrews	Seats (Total: 22)
	MW 2:00pm - 2:50pm	SPH 1312
	M 9:00am - 9:50am	SPH 0303 Discussion
0103	David Andrews	Seats (Total: 22)
	MW 2:00pm - 2:50pm	SPH 1312
	M 10:00am - 10:50am	SPH 0303 Discussion
0104	David Andrews	Seats (Total: 22)
	MW 2:00pm - 2:50pm	SPH 1312
	W 8:00am - 8:50am	SPH 0305 Discussion
0105	David Andrews	Seats (Total: 22)
	MW 2:00pm - 2:50pm	SPH 1312
	W 9:00am - 9:50am	SPH 0305 Discussion
0106	David Andrews	Seats (Total: 22)
	MW 2:00pm - 2:50pm	SPH 1312
	W 10:00am - 10:50am	SPH 0305 Discussion

0107	David Andrews	Seats (Total: 22)	
	MW 2:00pm - 2:50pm	SPH 1312	
	M 11:00am - 11:50am	SPH 0305	Discussion
0108	David Andrews	Seats (Total: 22)	
	MW 2:00pm - 2:50pm	SPH 1312	
	W 11:00am - 11:50am	SPH 0305	Discussion
FC01	Eric Stone	Seats (Total: 30)	
	MW 6:00pm - 7:15pm	SPH 1301	
	<i>Restricted to students in Freshman Connection.</i>		

KNES289

Topical Investigations

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Prerequisite: permission of department.

Contact department for information to register for this course.

KNES289L

Topical Investigations; Golf for Business and Life

Credits: 3

Grading Method: Regular,
Pass-Fail

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Students must pay a \$50.00 Facility fee. This course gives students the opportunity to learn the basics of the golf swing, etiquette, and most importantly, how to use golf as a business tool regardless of their chosen careers. Kinesiology majors may use this course to fulfill 2 credits of physical activity at intermediate level.

0101	Jeff Maynor	Seats (Total: 24)	
	TuTh 3:30pm - 5:30pm	SPH 0303	

KNES289R

Topical Investigations; Hoop Dreams: Black Masculinity and Sport

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHS,
SCIS

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

0101	Ronald Mower	Seats (Total: 50)
	MW 4:00pm - 5:15pm	ATL 2428

KNES289W Topical Investigations; The Cybernetic Human

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSNS, SCIS

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Can the profound and rapid technological advances experienced in the 21st century change what it means to be human or the nature of humanity? Emergent technologies, new materials, increased computer power, engineering innovations, and groundbreaking work in the sciences of cognition and action provide myriad opportunities for repairing and enhancing the human body and brain. Examines the ethical, social, and technological implications of an increasing synergism of technology and the body in sports and the arts, at work or home, rehabilitating the body and the brain, and society at large.

0101	Tim Kiemel	Seats (Total: 20)
	MF 2:00pm - 2:50pm	CCC 1100
	W 12:00pm - 12:50pm	SPH 0305 Discussion
0102	Tim Kiemel	Seats (Total: 20)
	MF 2:00pm - 2:50pm	CCC 1100
	W 10:00am - 10:50am	SPH 0303 Discussion
0103	Tim Kiemel	Seats (Total: 20)
	MF 2:00pm - 2:50pm	CCC 1100
	W 1:00pm - 1:50pm	SPH 0303 Discussion
0104	Tim Kiemel	Seats (Total: 20)
	MF 2:00pm - 2:50pm	CCC 1100
	W 2:00pm - 2:50pm	SPH 0303 Discussion

KNES293 History of Sport in America

Credits: 3 Grading Method: Regular, Pass-Fail CORE: SH General Education: DSHS

The growth and development of sport in America. The transformation of sport within the perspective of American history, including class sport, professionalization, amateurism, and international involvement.

Restricted to Majors or non-majors with less than or equal to 45 credits.

0101	Michael Friedman MW 10:00am - 10:50am W 1:00pm - 1:50pm	Seats (Total: 22) SPH 1312 SPH 1302	Discussion
0102	Michael Friedman MW 10:00am - 10:50am M 1:00pm - 1:50pm	Seats (Total: 22) SPH 1312 SPH 1302	Discussion
0103	Michael Friedman MW 10:00am - 10:50am M 2:00pm - 2:50pm	Seats (Total: 22) SPH 1312 SPH 1302	Discussion
0104	Michael Friedman MW 10:00am - 10:50am M 3:00pm - 3:50pm	Seats (Total: 22) SPH 1312 SPH 1302	Discussion
0105	Michael Friedman MW 10:00am - 10:50am W 12:00pm - 12:50pm	Seats (Total: 22) SPH 1312 SPH 0303	Discussion
0106	Michael Friedman MW 10:00am - 10:50am M 12:00pm - 12:50pm	Seats (Total: 22) SPH 1312 SPH 0303	Discussion
0107	Michael Friedman MW 10:00am - 10:50am W 2:00pm - 2:50pm	Seats (Total: 22) SPH 1312 SPH 1302	Discussion
0108	Michael Friedman MW 10:00am - 10:50am W 3:00pm - 3:50pm	Seats (Total: 22) SPH 1312 SPH 1302	Discussion
FC01	Brandon Wallace TuTh 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 30) CHM 1224	

Prerequisite: Minimum grade of C- in BSCI201. And 1 course with a minimum grade of C- from (MATH112, MATH113, MATH115); or (must have completed one General Education: Fundamental Studies-Math course with a minimum grade of C-; and must have math eligibility of MATH140 or higher). Recommended: PHYS121. Restriction: Must be in a major within SPHL-Kinesiology department.

The study of human movement and the physical and physiological principles upon which it depends. Body mechanics, posture, motor efficiency, sports, the performance of a typical individual and the influence of growth and development upon motor performance.

Students must pay a \$50 lab fee.

0101	Ross Miller MW 3:00pm - 4:15pm Tu 8:00am - 9:50am	Seats (Total: 18) SPH 1312 SPH 0223 Lab
0102	Ross Miller MW 3:00pm - 4:15pm Tu 10:00am - 11:50am	Seats (Total: 18) SPH 1312 SPH 0223 Lab
0103	Ross Miller MW 3:00pm - 4:15pm Tu 12:00pm - 1:50pm	Seats (Total: 18) SPH 1312 SPH 0223 Lab
0104	Ross Miller MW 3:00pm - 4:15pm Tu 2:00pm - 3:50pm	Seats (Total: 18) SPH 1312 SPH 0223 Lab
0105	Ross Miller MW 3:00pm - 4:15pm Th 8:00am - 9:50am	Seats (Total: 18) SPH 1312 SPH 0223 Lab
0106	Ross Miller MW 3:00pm - 4:15pm Th 10:00am - 11:50am	Seats (Total: 18) SPH 1312 SPH 0223 Lab
0107	Ross Miller MW 3:00pm - 4:15pm Th 12:00pm - 1:50pm	Seats (Total: 18) SPH 1312 SPH 0223 Lab
0108	Ross Miller MW 3:00pm - 4:15pm Th 2:00pm - 3:50pm	Seats (Total: 18) SPH 1312 SPH 0223 Lab

KNES300H Biomechanics of Human Motion

(Perm req)

Credits: 4

Grading Method: Regular,
Pass-Fail

Prerequisite: Minimum grade of C- in BSCI201. And 1 course with a minimum grade of C- from (MATH112, MATH113, MATH115); or (must have completed one General Education: Fundamental Studies-Math course with a minimum grade of C-; and must have math eligibility of MATH140 or higher). Recommended: PHYS121. Restriction: Must be in a major within SPHL-Kinesiology department.

The study of human movement and the physical and physiological principles upon which it depends. Body mechanics, posture, motor efficiency, sports, the performance of a typical individual and the influence of growth and development upon motor performance.

This section is restricted to students who have been admitted in the Kinesiology Honors program. Students must pay a \$50 lab fee.

0101	Ross Miller	Seats (Total: 4)
	MW 3:00pm - 4:15pm	SPH 1312
	Contact instructor or department for details.	

KNES320 Physiological Basis of Physical Activity and Human Health

Credits: 4

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in BSCI201 and BSCI202. Restriction: Must be in Public Health Science program. Credit only granted for: KNES360 or KNES320.

A study of the responses and chronic adaptations to physical activity and exercise, with particular emphasis on the interaction between human health and physical activity. The laboratory component of course will focus on the assessment of physical activity and measurement of physiological adaptations to exercise. Students are expected to gain an understanding and appreciation for the benefits of physical activity and exercise in the context of public health.

Students must pay a \$50 lab fee.

0101	Steven Prior	Seats (Total: 20)
	TuTh 9:30am - 10:45am	SPH 1312
	M 12:00pm - 1:50pm	SPH 0125 Lab
0102	Steven Prior	Seats (Total: 20)
	TuTh 9:30am - 10:45am	SPH 1312
	M 2:00pm - 3:50pm	SPH 0125 Lab

0103	Steven Prior TuTh 9:30am - 10:45am W 12:00pm - 1:50pm	Seats (Total: 20) SPH 1312 SPH 0125	Lab
0104	Steven Prior TuTh 9:30am - 10:45am W 2:00pm - 3:50pm	Seats (Total: 20) SPH 1312 SPH 0125	Lab
0105	Steven Prior TuTh 9:30am - 10:45am F 10:00am - 11:50am	Seats (Total: 20) SPH 1312 SPH 0125	Lab
0106	Steven Prior TuTh 9:30am - 10:45am F 12:00pm - 1:50pm	Seats (Total: 20) SPH 1312 SPH 0125	Lab
0107	Steven Prior TuTh 9:30am - 10:45am W 10:00am - 11:50am	Seats (Total: 20) SPH 1312 SPH 0125	Lab
0108	Steven Prior TuTh 9:30am - 10:45am W 8:00am - 9:50am	Seats (Total: 20) SPH 1312 SPH 0125	Lab
ESG1	Jeffrey Beans, Noah Gibson Tu 10:00am - 12:30pm W 2:30pm - 4:30pm <i>Restricted to Shady Grove students in the Public Health Sciences major.</i>	Seats (Total: 20) BLD3 3226 BLD1 203A	Lab
ESG2	Jeffrey Beans, Noah Gibson Tu 10:00am - 12:30pm M 12:00pm - 2:00pm <i>Restricted to Shady Grove students in the Public Health Sciences major.</i>	Seats (Total: 15) BLD3 3226 BLD1 203A	Lab

KNES332

Exercise Testing and Prescription for the Fitness Professional

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES360. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits. Credit only granted for: KNES332 or KNES389G. Formerly: KNES389G.

Practical applications of exercise physiology and psychology to target fitness instruction for the general adult population Includes discussion of certification standards and professional development as well as evaluation of program safety and current trends.

0101	Jo Zimmerman	Seats (Total: 25)
	WF 8:00am - 9:50am	SPH 0308

KNES332H Exercise Testing and Prescription for the Fitness Professional

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES360. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits. Credit only granted for: KNES332 or KNES389G. Formerly: KNES389G.

Practical applications of exercise physiology and psychology to target fitness instruction for the general adult population Includes discussion of certification standards and professional development as well as evaluation of program safety and current trends.

0101	Jo Zimmerman	Seats (Total: 2)
	WF 8:00am - 9:50am	SPH 0308

KNES333 Motor Development and Fitness for Individuals with Disabilities

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in KNES370. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 60 credits.

Implications of Federal and State regulations for planning and implementing motor development and physical fitness programs for individuals with disabilities. Evaluation strategies for assessing motor performance and fitness levels in educational programs for these individuals.

Students are required to choose a placement for a service-learning experience involving direct work with children who have disabilities. Students may choose from a list of local schools (listed in the syllabus. that have special education programs; or they may complete this requirement at the Children's Developmental Clinic held on campus in the SPH (School of Public Health) building every Saturday 8:30am-12:30pm.

0101	Dennis Vacante	Seats (Total: 32)
	Th 7:00pm - 9:30pm	SPH 0308

KNES335 Swimming Pool Management

Credits: 2 Grading Method: Regular,
Pass-Fail

Credit only granted for: KNES235 or KNES335. Formerly: KNES335.

Analysis of the position of the swimming pool manager. The systematic treatment of swimming pool water; swimming pool first aid; and laws pertaining to swimming pool operation. Qualifies the student for a pool operator's license in most Maryland counties.

This class does NOT fulfill a KNES Options Requirement.

0101	John Felts	Seats (Total: 35)
	TuTh 9:30am - 10:30am	ERC B0136

KNES350 The Psychology of Sports

Credits: 3 Grading Method: Regular, General Education: DSHS
Pass-Fail

An exploration of personality factors, including but not limited to motivation, aggression and emotion, as they affect sports participation and motor skill performance.

0101	Elizabeth Brown	Seats (Total: 60)
	TuTh 2:00pm - 3:15pm	SPH 1301
<i>This section is for KNES Majors Only.</i>		
0201	Jay Goldstein	Seats (Total: 90)
	TuTh 8:00am - 9:15am	ATL 2400

KNES350H The Psychology of Sports

(Perm req)

Credits: 3 Grading Method: Regular, General Education: DSHS
Pass-Fail, Audit

An exploration of personality factors, including but not limited to motivation, aggression and emotion, as they affect sports participation and motor skill performance.

This section is restricted to students who have been admitted in the Kinesiology Honors program.

0101	Elizabeth Brown	Seats (Total: 3)
	TuTh 2:00pm - 3:15pm	SPH 1301
0201	Jay Goldstein	Seats (Total: 3)
	TuTh 8:00am - 9:15am	ATL 2400

Credits: 4 Grading Method: Regular,
Pass-Fail

Prerequisite: Minimum grade of C- in BSCI202 and BSCI201; or permission of SPHL-Kinesiology department. Restriction: Must be in one of the following programs (Kinesiology; Public Health Science).

A study of the physiology of exercise, including concepts of work, muscular contraction, energy transformation, metabolism, oxygen debt, and nutrition and athletic performance. Emphasis on cardiovascular and respiratory function in relation to physical activity and training.

Students must pay a \$50 lab fee.

0101	Sarah Glancy	Seats (Total: 18)
	MWF 12:00pm - 12:50pm	SPH 1312
	Tu 8:00am - 9:50am	SPH 0125 Lab
	<i>Restricted to students in the Kinesiology major (code:08351).</i>	
0102	Sarah Glancy	Seats (Total: 18)
	MWF 12:00pm - 12:50pm	SPH 1312
	Tu 10:00am - 11:50am	SPH 0125 Lab
	<i>Restricted to students in the Kinesiology major (code:08351).</i>	
0103	Sarah Glancy	Seats (Total: 18)
	MWF 12:00pm - 12:50pm	SPH 1312
	Tu 12:00pm - 1:50pm	SPH 0125 Lab
	<i>Restricted to students in the Kinesiology major (code:08351).</i>	
0104	Sarah Glancy	Seats (Total: 18)
	MWF 12:00pm - 12:50pm	SPH 1312
	Tu 2:00pm - 3:50pm	SPH 0125 Lab
	<i>Restricted to students in the Kinesiology major (code:08351).</i>	
0105	Sarah Glancy	Seats (Total: 18)
	MWF 12:00pm - 12:50pm	SPH 1312
	Th 8:00am - 9:50am	SPH 0125 Lab
0106	Sarah Glancy	Seats (Total: 18)
	MWF 12:00pm - 12:50pm	SPH 1312
	Th 10:00am - 11:50am	SPH 0125 Lab
	<i>Restricted to students in the Kinesiology major (code:08351).</i>	

0107	Sarah Glancy	Seats (Total: 18)	
	MWF 12:00pm - 12:50pm	SPH 1312	
	Th 12:00pm - 1:50pm	SPH 0125	Lab
<i>Restricted to students in the Kinesiology major (code:08351).</i>			
0108	Sarah Glancy	Seats (Total: 18)	
	MWF 12:00pm - 12:50pm	SPH 1312	
	Th 2:00pm - 3:50pm	SPH 0125	Lab
<i>Restricted to students in the Kinesiology major (code:08351).</i>			

KNES360H

Physiology of Exercise

(Perm req)

Credits: 4

Grading Method: Regular,
Pass-Fail

Prerequisite: Minimum grade of C- in BSCI202 and BSCI201; or permission of SPHL-Kinesiology department. Restriction: Must be in one of the following programs (Kinesiology; Public Health Science).

A study of the physiology of exercise, including concepts of work, muscular contraction, energy transformation, metabolism, oxygen debt, and nutrition and athletic performance. Emphasis on cardiovascular and respiratory function in relation to physical activity and training.

This section is restricted to students who have been admitted in the Kinesiology Honors program. Students must pay a \$50 lab fee.

0101	Sarah Glancy	Seats (Total: 4)	
	MWF 12:00pm - 12:50pm	SPH 1312	
Contact instructor or department for details.			

KNES370

Motor Development

Credits: 3

Grading Method: Regular,
Pass-Fail

Restriction: Must be in a major within SPHL-Kinesiology department.

Motor development across the life span. The developmental sequences of motor skills from birth to old age; neuromaturation of neuromuscular system; analysis of the underlying mechanisms of motor skill development; and correlates of motor development.

0101	Tim Kiemel	Seats (Total: 18)	
	MW 1:00pm - 1:50pm	SPH 1312	
	M 9:00am - 9:50am	SPH 0223	Lab

0102	Tim Kiemel	Seats (Total: 18)	
	MW 1:00pm - 1:50pm	SPH 1312	
	M 10:00am - 10:50am	SPH 0223	Lab
0103	Tim Kiemel	Seats (Total: 18)	
	MW 1:00pm - 1:50pm	SPH 1312	
	M 11:00am - 11:50am	SPH 0223	Lab
0104	Tim Kiemel	Seats (Total: 18)	
	MW 1:00pm - 1:50pm	SPH 1312	
	M 12:00pm - 12:50pm	SPH 0223	Lab
0105	Tim Kiemel	Seats (Total: 18)	
	MW 1:00pm - 1:50pm	SPH 1312	
	W 9:00am - 9:50am	SPH 0223	Lab
0106	Tim Kiemel	Seats (Total: 18)	
	MW 1:00pm - 1:50pm	SPH 1312	
	W 10:00am - 10:50am	SPH 0223	Lab
0107	Tim Kiemel	Seats (Total: 18)	
	MW 1:00pm - 1:50pm	SPH 1312	
	W 11:00am - 11:50am	SPH 0223	Lab
0108	Tim Kiemel	Seats (Total: 18)	
	MW 1:00pm - 1:50pm	SPH 1312	
	W 12:00pm - 12:50pm	SPH 0223	Lab

KNES370H

Motor Development

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail

Restriction: Must be in a major within SPHL-Kinesiology department.

Motor development across the life span. The developmental sequences of motor skills from birth to old age; neuromaturation of neuromuscular system; analysis of the underlying mechanisms of motor skill development; and correlates of motor development.

This section is restricted to students who have been admitted in the Kinesiology Honors program.

0101	Tim Kiemel	Seats (Total: 3)		
	MW 1:00pm - 1:50pm	SPH 1312		
	TBA	SPH 0223	Lab	

KNES385

Motor Control and Learning

Credits: 3 Grading Method: Regular,
Pass-Fail

Restriction: Must be in a major within SPHL-Kinesiology department.

Physiological and cognitive bases for motor control and their applications to the acquisition of movement skills and understanding of movement disorders. Topics include: neurophysiology, motor control theory, sensory/perceptual processes, perception-action coupling, information processing, memory, attention, individual differences, motivation, practice organization and role of feedback.

0101	Rodolphe Gentili	Seats (Total: 18)		
	MW 11:00am - 11:50am	SPH 1312		
	F 8:00am - 8:50am	SPH 0223	Lab	
0102	Rodolphe Gentili	Seats (Total: 18)		
	MW 11:00am - 11:50am	SPH 1312		
	F 9:00am - 9:50am	SPH 0223	Lab	
0103	Rodolphe Gentili	Seats (Total: 18)		
	MW 11:00am - 11:50am	SPH 1312		
	F 10:00am - 10:50am	SPH 0223	Lab	
0104	Rodolphe Gentili	Seats (Total: 18)		
	MW 11:00am - 11:50am	SPH 1312		
	F 11:00am - 11:50am	SPH 0223	Lab	
0105	Rodolphe Gentili	Seats (Total: 18)		
	MW 11:00am - 11:50am	SPH 1312		
	F 12:00pm - 12:50pm	SPH 0223	Lab	
0106	Rodolphe Gentili	Seats (Total: 18)		
	MW 11:00am - 11:50am	SPH 1312		
	F 1:00pm - 1:50pm	SPH 0223	Lab	
0107	Rodolphe Gentili	Seats (Total: 18)		
	MW 11:00am - 11:50am	SPH 1312		
	M 1:00pm - 1:50pm	SPH 0223	Lab	

0108	Rodolphe Gentili	Seats (Total: 18)	
	MW 11:00am - 11:50am	SPH 1312	
	M 2:00pm - 2:50pm	SPH 0223	Lab

KNES385H Motor Control and Learning

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail

Restriction: Must be in a major within SPHL-Kinesiology department.

Physiological and cognitive bases for motor control and their applications to the acquisition of movement skills and understanding of movement disorders. Topics include: neurophysiology, motor control theory, sensory/perceptual processes, perception-action coupling, information processing, memory, attention, individual differences, motivation, practice organization and role of feedback.

This section is restricted to students who have been admitted in the Kinesiology Honors program.

0101	Rodolphe Gentili	Seats (Total: 8)	
	MW 11:00am - 11:50am	SPH 1312	
	Contact instructor or department for details.		

KNES386 Experiential Learning

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: Must have completed three KNES core classes. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits.

Explore and analyze concepts and procedures related to a quality service-learning experience to include planning, implementing, and evaluating a service-learning project.

[Click here for more course information.](#)

0101	Lindsey Winter	Seats (Total: 25)	
	TuTh 12:30pm - 1:45pm	SPH 0303	

KNES389 Topical Investigations

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Prerequisite: permission of instructor and department. This class does NOT fulfill a KNES Options Requirement.

Contact department for information to register for this course.

KNES389E Topical Investigations; Children's Development Clinic

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

A service/learning course designed for students, teachers and individuals interested in working with children who have special needs. Students will work one-on-one with an assigned child in the areas of motor development, reading, language, and social skills. Students will be required to complete fingerprinting and background checks (at no cost to the students). This class does NOT fulfill a KNES Options Requirement.

0101	Dennis Vacante	Seats (Total: 30)
	Sa 8:30am - 12:30pm	SPH 2101

KNES389I Topical Investigations; Sport Economics

Credits: 3 Grading Method: Regular,
Pass-Fail

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Prerequisite: KNES287 with a C- or better. Examines sport as a diverse cultural form through which physical activity is organized, regulated, and consumed within contemporary society. Evaluation of the complex interactions between sport culture economic institutions and forces.

0101	Michael Friedman	Seats (Total: 32)
	MW 3:30pm - 4:45pm	SPH 1301

KNES389K Topical Investigations; Kinesiology Internship

(Perm req) Credits: 3 Grading Method: Regular

Independent study by an individual student or a group of students in special areas of knowledge not covered by regularly scheduled courses.

Prerequisite: permission of instructor and department.

Contact department for information to register for this course.

KNES400**The Foundations of Public Health in Kinesiology**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES287. Restriction: Senior standing or higher; and must be in a major within the SPHL-Kinesiology department. Credit only granted for: KNES400 or KNES498A. Formerly: KNES498A.

An investigation of the role of physical activity and inactivity in relation to health and well-being through a public health perspective. Past and current perspectives on health promotion, health education, and social policies and approaches will be examined for various populations.

0101	Shannon Jette	Seats (Total: 18)	
	MW 11:00am - 11:50am	IRB 0318	
	W 12:00pm - 12:50pm	SPH 0301	Discussion
0102	Shannon Jette	Seats (Total: 18)	
	MW 11:00am - 11:50am	IRB 0318	
	W 1:00pm - 1:50pm	SPH 0305	Discussion
0103	Shannon Jette	Seats (Total: 18)	
	MW 11:00am - 11:50am	IRB 0318	
	W 2:00pm - 2:50pm	SPH 0305	Discussion
0104	Shannon Jette	Seats (Total: 18)	
	MW 11:00am - 11:50am	IRB 0318	
	W 3:00pm - 3:50pm	SPH 0303	Discussion

KNES400H**The Foundations of Public Health in Kinesiology**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES287. Restriction: Senior standing or higher; and must be in a major within the SPHL-Kinesiology department. Credit only granted for: KNES400 or KNES498A. Formerly: KNES498A.

An investigation of the role of physical activity and inactivity in relation to health and well-being through a public health perspective. Past and current perspectives on health promotion, health education, and social policies and approaches will be examined for various populations.

0101	Shannon Jette	Seats (Total: 5)	
	MW 11:00am - 11:50am	IRB 0318	
	Contact instructor or department for details.		

KNES401 Zip Code: Prediction on Physical Activity & Health

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in SPHL100. Restriction: Must have earned a minimum of 75 credits and must be in a major within SPHL-Kinesiology department. Credit only granted for: KNES401 or KNES498A. Formerly: KNES498A.

An exploration of the relationship and impacts of built and other social environments on health, including physical activity, social equity, gentrification, and many others.

0101	Jennifer Roberts	Seats (Total: 25)
	W 2:00pm - 4:30pm	CHE 2145

KNES440 Psychology of Athletic Performance

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES350. Restriction: Must have earned a minimum of 75 credits. Credit only granted for: KNES498P, KNES689Z, or KNES440.

Examines the psychological factors, mechanisms, and processes in athletic performance. Utilizes a social psychological approach to focus on the study and review of individual performance in both the interpersonal and social context.

0101	Seppo Iso-Ahola	Seats (Total: 30)
	M 4:00pm - 6:35pm	SPH 1302

KNES440H Psychology of Athletic Performance

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES350. Restriction: Must have earned a minimum of 75 credits. Credit only granted for: KNES498P, KNES689Z, or KNES440.

Examines the psychological factors, mechanisms, and processes in athletic performance. Utilizes a social psychological approach to focus on the study and review of individual performance in both the interpersonal and social context.

This section is restricted to students who have been admitted in the Kinesiology Honors program.

0101	Seppo Iso-Ahola	Seats (Total: 3)
	M 4:00pm - 6:35pm	SPH 1302

KNES451 Children and Sport: A Psychosocial Perspective

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: Minimum grade of C- in KNES350. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits.

Examination of youth sports from a psychosocial perspective, including the impact of highly structured sports on young athletes and the complex social network of coaches, parents and peers.

0101	Elizabeth Brown	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	SPH 0305

KNES451H Children and Sport: A Psychosocial Perspective

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: Minimum grade of C- in KNES350. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits.

Examination of youth sports from a psychosocial perspective, including the impact of highly structured sports on young athletes and the complex social network of coaches, parents and peers.

0101	Elizabeth Brown	Seats (Total: 1)
	TuTh 11:00am - 12:15pm	SPH 0305

KNES457 Managing Youth Programs: Educational, Fitness and Sport

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES350 and KNES370. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits. Credit only granted for: KNES457 or KNES498Y.

An examination of the basic functions involved in managing physical education, fitness, and youth sports programs. Focus on leadership skills, organizational management, and techniques for applying learned skills in a variety of organizational settings that serve the nation's youth.

0101	Jay Goldstein	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	SPH 0308

KNES460 Physiology of Aging and the Impact of Physical Activity

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (KNES320, KNES360). Restriction: Must be in one of the following programs (Kinesiology; Public Health Science); and must have earned a minimum of 75 credits. Credit only granted for: KNES498F or KNES460. Formerly: KNES498F.

Biology of the aging process in healthy individuals and those with chronic disease, the effects of acute exercise and exercise training on the physiological decline that occurs in humans, and the role that regular physical activity plays on enhancing the quality of life and activities of daily living in individuals.

0101	Marc Rogers	Seats (Total: 32)
	TuTh 12:30pm - 1:45pm	SPH 0305

KNES460H Physiology of Aging and the Impact of Physical Activity

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (KNES320, KNES360). Restriction: Must be in one of the following programs (Kinesiology; Public Health Science); and must have earned a minimum of 75 credits. Credit only granted for: KNES498F or KNES460. Formerly: KNES498F.

Biology of the aging process in healthy individuals and those with chronic disease, the effects of acute exercise and exercise training on the physiological decline that occurs in humans, and the role that regular physical activity plays on enhancing the quality of life and activities of daily living in individuals.

0101	Marc Rogers	Seats (Total: 2)
	TuTh 12:30pm - 1:45pm	SPH 0305

KNES461 Exercise and Body Composition

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: 1 course with a minimum grade of C- from (KNES320, KNES360). Restriction: Must be in one of the following programs (Kinesiology; Public Health Science) ; and must have earned a minimum of 75 credits.

An in-depth overview on how body composition is measured, what it is composed of, and the physiological and biochemical signals that change it. The effects of acute and chronic exercise on food storage, breakdown, and use as an energy source, is the major focus. This information is applied to important issues in public health and athletic performance.

0101	Ben Hurley	Seats (Total: 31)
	TuTh 9:30am - 10:45am	SPH 0305

KNES461H Exercise and Body Composition

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail

Prerequisite: 1 course with a minimum grade of C- from (KNES320, KNES360). Restriction: Must be in one of the following programs (Kinesiology; Public Health Science) ; and must have earned a minimum of 75 credits.

An in-depth overview on how body composition is measured, what it is composed of, and the physiological and biochemical signals that change it. The effects of acute and chronic exercise on food storage, breakdown, and use as an energy source, is the major focus. This information is applied to important issues in public health and athletic performance.

This section is restricted to students who have been admitted in the Kinesiology Honors program.

0101	Ben Hurley	Seats (Total: 3)
	TuTh 9:30am - 10:45am	SPH 0305

KNES464

Exercise Metabolism: Role in Health and Disease

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES360. Restriction: Must have earned a minimum of 75 credits. Credit only granted for: KNES464 or KNES498L.

Examines the role of metabolism in kinesiology, especially as it relates to physical inactivity, health and disease. Includes bioenergetics, substrate utilization, cell signaling, and metabolic gene expression and their impact on chronic health conditions or disease.

Prerequisite: KNES360 with a C- or better

0101	Sarah Glancy	Seats (Total: 30)
	MWF 10:00am - 10:50am	SPH 0308

KNES464H

Exercise Metabolism: Role in Health and Disease

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in KNES360. Restriction: Must have earned a minimum of 75 credits. Credit only granted for: KNES464 or KNES498L.

Examines the role of metabolism in kinesiology, especially as it relates to physical inactivity, health and disease. Includes bioenergetics, substrate utilization, cell signaling, and metabolic gene expression and their impact on chronic health conditions or disease.

Prerequisite: KNES360 with a C- or better

0101	Sarah Glancy	Seats (Total: 3)
	MWF 10:00am - 10:50am	SPH 0308

KNES465 Physical Activity and Disease Prevention and Treatment

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (KNES320, KNES360). Restriction: Must have earned a minimum of 75 credits. Credit only granted for: KNES465 or KNES498A.

Critically examines the scientific evidence that supports the use of physical activity to prevent and treat age-related diseases, including cardiovascular disease, diabetes, abnormal lipoprotein-lipid levels, hypertension, obesity, osteoporosis and cancer.

0101	Sushant Ranadive	Seats (Total: 32)
	TuTh 9:30am - 10:45am	ATL 1114

KNES465H Physical Activity and Disease Prevention and Treatment

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (KNES320, KNES360). Restriction: Must have earned a minimum of 75 credits. Credit only granted for: KNES465 or KNES498A.

Critically examines the scientific evidence that supports the use of physical activity to prevent and treat age-related diseases, including cardiovascular disease, diabetes, abnormal lipoprotein-lipid levels, hypertension, obesity, osteoporosis and cancer.

0101	Sushant Ranadive	Seats (Total: 3)
	TuTh 9:30am - 10:45am	ATL 1114

KNES476 Honors Thesis Proposal

(Perm req)

Credits: 3 Grading Method: Regular

Corequisite: KNES478. Restriction: Must be a KNES Honors student; and senior standing. Credit only granted for: KNES476 or KNES498R.

*Development of honors thesis proposal based on preliminary research and literature review.
Presentation of formal proposal to the thesis committee and fellow honors students.*

0101	Tim Kiemel	Seats (Total: 10)
	F 10:00am - 10:50am	SPH 0301
	Contact instructor or department for details.	

KNES478**Honors Seminar**

(Perm req)

Credits: 1

Grading Method: Regular

Guided discussion of research topics of current interest.

Continuing KNES Honors Students must enroll in KNES478 every semester they are in the program.

0101	Tim Kiemel	Seats (Total: 20)
	F 11:00am - 11:50am	SPH 0301

KNES483**Sport Marketing and Media**

Credits: 3

Grading Method: Regular,
Audit*Prerequisite: Minimum grade of C- in KNES287. Recommended: KNES355. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits.**Industry practices in sport marketing and media. Marketing strategies and consumer behavior in different sport contexts. Critical examination of selected social and economic issues related to the buying and selling of sport.*

0101	Stephen McDaniel	Seats (Total: 28)
	TuTh 11:00am - 12:15pm	SPH 0303

KNES483H**Sport Marketing and Media**

(Perm req)

Credits: 3

Grading Method: Regular,
Audit*Prerequisite: Minimum grade of C- in KNES287. Recommended: KNES355. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits.**Industry practices in sport marketing and media. Marketing strategies and consumer behavior in different sport contexts. Critical examination of selected social and economic issues related to the buying and selling of sport.*

0101	Stephen McDaniel	Seats (Total: 3)
	TuTh 11:00am - 12:15pm	SPH 0303

KNES485**Sport and Globalization**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DVUP

Prerequisite: Minimum grade of C- in KNES287. Restriction: Must be in a major within the SPHL-Kinesiology department; and must have earned a minimum of 75 credits.

Examination of sport culture from a global perspective; focuses on theorizing the similarities and differences between various national sporting cultures.

0101	Ronald Mower	Seats (Total: 50)
	M 10:00am - 11:15am	SPH 1303
	Class time/details on ELMs	ONLINE

KNES497

Kinesiology Senior Seminar

(Perm req)

Credits: 3

Grading Method: Regular

CORE: CS

General Education: DSSP

Prerequisite: A professional writing course with a minimum grade of C-; and must have completed 6 KNES core courses and 2 KNES option courses, all with a C- or higher; and must have completed STAT100 with a C- or better. Restriction: Senior standing or higher; and must be in Kinesiology program; and permission of department.

Discussions of contemporary issues vital to the discipline, critiques of research in the student's area/areas of special interest, completion of a major project where the student will be asked to demonstrate the ability to carry out investigative processes in problem solving and critical writing under faculty direction.

[Click here for more information.](#)

0102	Ronald Mower	Seats (Total: 20)
	W 10:00am - 12:30pm	SPH 1303
	<i>Historicizing Modern Sport, Physical Education, and Physical Culture.</i>	
0103	James Hagberg	Seats (Total: 20)
	Th 8:00am - 10:30am	SPH 0307
	<i>Physical Activity and the Obesity and Diabetes Epidemic</i>	
0106	Joanne Klossner	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	SPH 0307
	<i>Hot Topics in Sports Medicine.</i>	
0110	Jay Goldstein	Seats (Total: 20)
	Tu 4:00pm - 6:45pm	SPH 0125
	<i>Applied Sport and Exercise Psychology for Practitioners.</i>	

0113	Rodolphe Gentili	Seats (Total: 20)
	W 2:00pm - 4:30pm	SPH 0223
<i>Rehabilitation and Motor Control.</i>		

KNES498 Special Topics in Kinesiology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest in areas not covered by regularly scheduled courses.

This class does NOT fulfill a KNES Options Requirement.

Contact department for information to register for this course.

KNES498C Special Topics in Kinesiology; Exercise and Brain Health

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest in areas not covered by regularly scheduled courses.

Examines the evidence for exercise to affect brain function and brain health in children, in adults, and in old age. Covers the adaptations to acute and chronic exercise within brain networks related to emotion, stress reactivity, memory, and executive function, and the effectiveness of physical activity and exercise as treatments for depression, anxiety disorders, and cognitive impairment. Prerequisite: KNES350.

0101	J Carson Smith	Seats (Total: 31)
	TuTh 2:00pm - 3:15pm	SPH 0302

KNES498T Special Topics in Kinesiology; Principles and Applications of Exercise Rehabilitation

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest in areas not covered by regularly scheduled courses.

Prerequisites: BSCI202 and KNES300/KNES300H.

0101	Larry Plotkin	Seats (Total: 34)
	TuTh 8:00am - 9:15am	SPH 0305

KNES498W Special Topics in Kinesiology; Prosthetics for Limb Amputations

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest in areas not covered by regularly scheduled courses.

Prerequisite: KNES300. Introduction to the science of prosthetics and the artificial devices that are designed, developed and fit to replace the missing body part or parts lost through trauma, disease or congenital conditions.

0101	Douglas Collier	Seats (Total: 34)
	Tu 8:00am - 10:30am	SPH 0307

KNES600 Kinesiology in Public Health

Credits: 3 Grading Method: Regular,
 Audit

A broad introduction to public health within the context of the discipline of kinesiology, focusing on furthering the understanding of the ways kinesiology contributes toward achieving the goals of public health.

0101	Jennifer Roberts	Seats (Total: 15)
	Tu 4:00pm - 6:30pm	SPH 2334

KNES609 Research Issues in Kinesiology

(Perm req) Credits: 1 Grading Method: Regular

Issues, methodologies, and critical analyses of current research in Kinesiology.

Contact department for information to register for this course.

KNES618 Current Readings in Exercise and Applied Physiology

Credits: 1 Grading Method: Regular,
 Audit

Student-led presentations of contemporary literature in the areas of genetics, exercise science, fitness and health. Emphasis on papers describing new research findings, novel techniques, innovative methods, and emerging issues.

0101	James Hagberg	Seats (Total: 12)
	F 1:00pm - 1:50pm	SPH 2334

KNES660 Psychology of Athletic Performances

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: KNES350. Credit only granted for: KNES660 or KNES689Z. Formerly: KNES689Z.

Psychological factors, mechanisms, and processes in athletic performance. The basic approach is social psychological, according to which the focus is on individual performance in the interpersonal athletic context. Intrapersonal and interpersonal factors and their effects on athletic performance. Psychology of peak performance, choking, and errors of mental control. Analysis of the general principles and types of mental training.

0101	Seppo Iso-Ahola	Seats (Total: 30)
	M 4:00pm - 6:35pm	SPH 1302

KNES689 Special Problems in Kinesiology

(Perm req)

Credits: 1-6 Grading Method: Regular

Master or doctoral candidates who desire to pursue special research problems under the direction of their advisor may register for 1-6 hours of credit under this number.

Contact department for information to register for this course.

KNES689A Special Problems in Kinesiology; Assessing Learning in Physical Education

Credits: 3 Grading Method: Regular,
Audit

Master or doctoral candidates who desire to pursue special research problems under the direction of their advisor may register for 1-6 hours of credit under this number.

A study of the principles and techniques of educational measurement used to evaluate student learning in the cognitive, psychomotor and affective domains within the context of teaching effectiveness. Students will develop research proposals for implementation during the second half of their teaching internship.

Contact department for information to register for this course.

KNES689B Special Problems in Kinesiology; Physical Cultural Studies

Credits: 3 Grading Method: Regular,
Audit

Master or doctoral candidates who desire to pursue special research problems under the direction of their advisor may register for 1-6 hours of credit under this number.

0101	David Andrews	Seats (Total: 15)
	M 4:00pm - 6:30pm	SPH 2334

KNES689F Special Problems in Kinesiology; Psychobiological Foundations of Skilled Motor Behavior

Credits: 3 Grading Method: Regular,
Audit

Master or doctoral candidates who desire to pursue special research problems under the direction of their advisor may register for 1-6 hours of credit under this number.

0101	Kyle Jaquess	Seats (Total: 10)
	Th 4:00pm - 6:30pm	SPH 2334

KNES689T Special Problems in Kinesiology; Teaching Internship

(Perm req)

Credits: 1-6 Grading Method: Regular,
Audit

Master or doctoral candidates who desire to pursue special research problems under the direction of their advisor may register for 1-6 hours of credit under this number.

Outreach Secondary MCERT- KNES. Departmental permission required. Students are required to pay a course fee; refer to program materials for details.

Contact department for information to register for this course.

KNES689X Special Problems in Kinesiology; Exercise and Brain Health

Credits: 3 Grading Method: Regular,
Audit

Master or doctoral candidates who desire to pursue special research problems under the direction of their advisor may register for 1-6 hours of credit under this number.

0101	J Carson Smith	Seats (Total: 5)
	TuTh 2:00pm - 3:15pm	SPH 0302

KNES692 Cardiovascular Aspects of Exercise Physiology

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: KNES360.

A comprehensive consideration of the various cardiovascular factors affecting human physical performance. Emphasis on the regulation of cardiovascular functions during physical activity. Energy liberation and transfer, circulation, respiration, temperature regulation, physiology of work at altitudes, aerobic endurance training, and exercise, health and aging.

0101	Sushant Ranadive	Seats (Total: 15)
	W 4:00pm - 6:30pm	SPH 0125

KNES778 Internship in Physical Activity and Public Health

Credits: 1-4 Grading Method: Regular

The internship is a time-limited, supervised period of public/community health activities carried out in a health or allied health organization involved with physical activity. Students gain practical experience in areas such as program planning and implementation, program evaluation, public policy analysis, research, and management.

0101	Shannon Jette	Seats (Total: 5)
Contact instructor or department for details.		

KNES786 Capstone Project in Physical Activity and Public Health

Credits: 3 Grading Method: Regular

Prerequisite: KNES600, KNES601, and KNES602.

The culminating experience in which the student applies knowledge and skills learned in the MPH program to conduct independent work on a physical activity problem under the supervision of a faculty advisor.

0101	Andrea Romeo, Shannon Jette	Seats (Total: 5)
Contact instructor or department for details.		

KNES789 Advanced Projects in Kinesiology

(Perm req)

Credits: 1-3 Grading Method: Regular

Advanced projects examining current problems and trends in kinesiology.

Contact department for information to register for this course.

KNES789T Advanced Projects in Kinesiology; Current Issues in Hand Biomechanics & Motor Control

Credits: 3 Grading Method: Regular

Advanced projects examining current problems and trends in kinesiology.

0101	Jae Kun Shim	Seats (Total: 15)
	Th 4:00pm - 6:30pm	SPH 0125

KNES799 Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

KNES898 Pre-Candidacy Research

(Perm req)

Credits: 1-8

Grading Method: Regular

Contact department for information to register for this course.

KNES899

Doctoral Dissertation Research

(Perm req)

Credits: 6

Grading Method: Regular

Contact department for information to register for this course.

KORA Korean

Fall 2019

KORA101

Elementary Korean I

Credits: 3

Grading Method: Regular

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score; and permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must be a non-Heritage student with no background in Korean.

Introduction to the Korean language. Primary emphasis on oral skills, but Hangul, the Korean alphabet, will also be introduced.

0101	So-Hye Park, Seong Minne Koh MWF 10:00am - 10:50am	Seats (Total: 15) JMZ 1226
0201	So-Hye Park, Seong Minne Koh MW 2:00pm - 2:50pm F 2:00pm - 2:50pm	Seats (Total: 15) LEF 1222 JMZ 1103
0301	So-Hye Park, Seong Minne Koh MWF 11:00am - 11:50am	Seats (Total: 15) JMZ 1226

KORA201

Intermediate Korean I

Credits: 3

Grading Method: Regular

CORE: HO

Prerequisite: KORA102; or permission of instructor.

An intermediate-level course designed for non-Heritage students. It begins the second year of instruction in the University's two-track Korean Program.

0101	Younghi Ramsey, So-Hye Park MWF 1:00pm - 1:50pm	Seats (Total: 15) JMZ 2207
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KORA398F

Special Topics in Korean Studies; Film Culture in Korea

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Study of particular aspect of Korean language, literature, and/or culture. Topic and language of instruction to be announced when course is offered.

This is a CIC courseshare course. The instructor, Professor Se-Mi Oh, is at the University of Michigan, but UMD students enroll and receive it at UMD. This class offers a survey of films produced during the last hundred years in South Korea. In order to better understand the resurgence of Korean films in recent years and the critical acclaim that they have received domestically and globally, the course will examine representative films, directors, and genres from the inception of the industry in the colonial era through the recent years. Through the screening and in-depth discussions of the films, students will gain insights into the larger historical, social, and cultural contexts that informed and shaped the production and consumption of the films. This course, therefore, will explore the history of Korean cinema through the framework of national/transnational cinema discourse, auteur/genre theory, globalization, the division system, and the problem of nation/state. While working through different genres of historical drama, melodrama, literary adaptation, horror, mystery, and monster films, we will discuss topics pertaining to family, sexuality, gender, cultural tradition, national identity, social movement, and urbanization. We will also pay particular attention to the production of films and the role of censorship, and how artistic assertion and negotiation are reflected in their final cut.

0101	Instructor: TBA	Seats (Total: 12)
	TuTh 2:30pm - 4:00pm	JMZ 1205

KORA398Y Special Topics in Korean Studies; Advanced Korean I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Study of particular aspect of Korean language, literature, and/or culture. Topic and language of instruction to be announced when course is offered.

This course is a third-year Korean language course, the continuation of KORA202. To enroll, students need to have taken KORA202 or get permission from the instructor.

0101	Younghi Ramsey	Seats (Total: 15)
	MW 2:00pm - 3:15pm	JMZ 3120

KORA499 Independent Study Korean

(Perm req) Credits: 1-3 Grading Method: Regular

Independent study under faculty supervision.

Contact department for information to register for this course.

LARC141**Design Fundamentals Studio**

(Perm req)

Credits: 4

Grading Method: Regular

Prerequisite: LARC140. Recommended: Concurrently enrolled in LARC263. Restriction: Permission of AGNR-Plant Science & Landscape Architecture department; and sophomore standing or higher; and must be in Landscape Architecture program.

Fundamentals of basic design focusing on creative problem solving associated with landscape architecture.

0101	Ann Anderson	Seats (Total: 15)	
	MW 2:00pm - 3:15pm	PLS 2152	
	MW 3:30pm - 4:50pm	PLS 2152	Lab

LARC151**Urban Agriculture: Designing and Assessing Edible Landscapes**

Credits: 3

Grading Method: Regular

General Education: DSSP,
SCIS

Students will examine the growing development of urban agriculture and edible landscapes. Urban agriculture has seen a recent growth and interest in cities across the globe. From Paris to New York, from Baltimore to Detroit, urban agriculture is an emerging land use to address a variety of needs. Redevelopment, food deserts, community engagement and environmental justice are just some of the issues and topics that are connected to the recent growth of urban agriculture. This course will take a critical examination of urban agriculture's contribution to the food system, its input and outputs in the urban landscape, and the planning and design of urban agriculture and edible landscapes.

0101	Dennis Nola	Seats (Total: 20)	
	MW 11:00am - 11:50am	ESJ 2208	
	M 1:00pm - 1:50pm	PLS 1164	Discussion
0102	Dennis Nola	Seats (Total: 20)	
	MW 11:00am - 11:50am	ESJ 2208	
	M 1:00pm - 1:50pm	PLS 1113	Discussion
0103	Dennis Nola	Seats (Total: 20)	
	MW 11:00am - 11:50am	ESJ 2208	
	F 12:00pm - 12:50pm	PLS 1158	Discussion
0104	Dennis Nola	Seats (Total: 20)	
	MW 11:00am - 11:50am	ESJ 2208	
	F 12:00pm - 12:50pm	PLS 1146	Discussion

0105	Dennis Nola	Seats (Total: 20)	
	MW 11:00am - 11:50am	ESJ 2208	
	M 3:00pm - 3:50pm	PLS 1119	Discussion
0106	Dennis Nola	Seats (Total: 20)	
	MW 11:00am - 11:50am	ESJ 2208	
	M 3:00pm - 3:50pm	PLS 1158	Discussion
0107	Dennis Nola	Seats (Total: 20)	
	MW 11:00am - 11:50am	ESJ 2208	
	M 4:00pm - 4:50pm	PLS 1158	Discussion
0108	Dennis Nola	Seats (Total: 20)	
	MW 11:00am - 11:50am	ESJ 2208	
	M 4:00pm - 4:50pm	PLS 1119	Discussion
FC01	Eric Samet-Shaw, Amy Sametshaw	Seats (Total: 20)	
	MW 7:30pm - 8:45pm	PLS 1115	
	<i>Restricted to students in Freshmen Connection.</i>		

LARC160

Introduction to Landscape Architecture

Credits: 3

Grading Method: Regular

CORE: HO

General Education: DSHU,
DSSP

History, theory, philosophy and current practice of the profession of landscape architecture. Explores the interactive relationship between humans and their environment by examining people's perceptions of and changing attitude towards the landscape, as well as, an examination of how these are related to ecological and cultural influences.

0101	Christopher Ellis	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	ARC 0204	
	M 2:00pm - 2:50pm	PLS 1113	Discussion
0102	Christopher Ellis	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	ARC 0204	
	M 3:00pm - 3:50pm	PLS 1113	Discussion
0103	Christopher Ellis	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	ARC 0204	
	M 2:00pm - 2:50pm	PLS 1168	Discussion

0104	Christopher Ellis MW 12:00pm - 12:50pm M 3:00pm - 3:50pm	Seats (Total: 20) ARC 0204 PLS 1176	Discussion
0105	Christopher Ellis MW 12:00pm - 12:50pm W 2:00pm - 2:50pm	Seats (Total: 20) ARC 0204 PLS 1113	Discussion
0106	Christopher Ellis MW 12:00pm - 12:50pm W 3:00pm - 3:50pm	Seats (Total: 20) ARC 0204 PLS 1113	Discussion
0107	Christopher Ellis MW 12:00pm - 12:50pm M 4:00pm - 4:50pm	Seats (Total: 18) ARC 0204 PLS 1113	Discussion
0108	Christopher Ellis MW 12:00pm - 12:50pm M 5:00pm - 5:50pm	Seats (Total: 18) ARC 0204 PLS 1113	Discussion
FC01	Colleen Vacelet MW 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 30) PLS 1130	

LARC265

(Perm req)

Site Analysis and Ecological Principles

Credits: 3 Grading Method: Regular

Prerequisite: LARC141. Corequisite: LARC240 and LARC221. Restriction: Permission of AGNR-Plant Science & Landscape Architecture department; and sophomore standing or higher; and must be in Landscape Architecture program. Credit only granted for: LARC265 or ARCH460.

Principles and methods of site analysis with an emphasis on the application of ecological principles in landscape architecture, architecture and planning.

0101	Thomas Mateya TuTh 9:30am - 10:45am	Seats (Total: 20) PLS 1158
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LARC320

(Perm req)

Principles of Site Engineering

Credits: 3 Grading Method: Regular

Prerequisite: LARC221. Corequisite: LARC340. Restriction: Must be in Landscape Architecture program; and junior standing or higher.

The study and application of landscape construction principles as applied to grading, drainage, site layout, storm water management, and vehicular and pedestrian circulation.

0101	Joseph Burkhardt	Seats (Total: 20)	
	Th 8:00am - 10:45am	PLS 2150	
	Tu 9:30am - 10:45am	PLS 2150	Lab

LARC340 Site Planning and Design Studio

(Perm req)

Credits: 5 Grading Method: Regular

Prerequisite: LARC221; and LARC240; and LARC265. Corequisite: LARC320. Restriction: Must be in Landscape Architecture program; and junior standing or higher.

An examination of the influence of landscape character and site features (natural and cultural) on landscape architecture, architecture and planning through application in the studio setting.

0101	Dennis Nola	Seats (Total: 17)	
	M 1:00pm - 1:50pm	PLS 2150	
	W 2:00pm - 2:50pm	PLS 2150	
	M 2:00pm - 4:50pm	PLS 2150	Lab
	W 3:00pm - 5:50pm	PLS 2150	Lab

LARC389 Internship in Landscape Architecture

(Perm req)

Credits: 3 Grading Method: Regular

A supervised internship where students earn credit for work experience related to their career goals. Each student must keep a work log, work on a special project, and produce a report related to this project. An evaluation from the external supervisor of the project is required. Participation requires application to the internship advisor in the preceding semester.

A supervised internship where students earn credit for work experience related to their career goals. Each student must keep a work log, work on a special project, and produce a report related to this project. An evaluation from the external supervisor of the project is required. Participation requires application to the internship advisor in the preceding semester.

0101	Mark Carroll	Seats (Total: 15)	
	W 9:00am - 9:50am	PLS 1119	
	Contact instructor or department for details.		

LARC420 Professional Practice

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: LARC321. Restriction: Must be in Landscape Architecture program.

An introduction to and comparative study of the professional concerns of design firms. Focus on planning, legal, ethical, marketing and management considerations of interdisciplinary practices.

0101	JoAnn Trach Tongson	Seats (Total: 30)
	Tu 9:30am - 12:15pm	PLS 1117

LARC440

Urban Design Studio

(Perm req)

Credits: 5

Grading Method: Regular

Prerequisite: LARC321; and LARC340; and LARC341. Restriction: Must be in Landscape Architecture program.

The landscape architect's role within the interdisciplinary urban design process, focusing on urban site design issues. Pedestrian friendly site design and the future of sustainable development will be studied.

0101	Jack Sullivan	Seats (Total: 17)
	MW 1:00pm - 1:50pm	PLS 2148
	MW 2:00pm - 4:50pm	PLS 2148 Lab

LARC452

Green Infrastructure and Community Greening

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PLSC100 or PLSC101; or permission of instructor. Restriction: Junior standing or higher. Credit only granted for: LARC489G or LARC452. Formerly: LARC489G.

A critical look and exploration of green infrastructure (GI) elements in the built environment in contributing to ecosystems services and the sustainability of the built environment. The course explores the science, issues, challenges, and the policy, planning and design solutions offered by green infrastructure.

0101	David Myers	Seats (Total: 20)
	M 9:00am - 10:50am	PLS 1113
	F 9:00am - 9:50am	PLS 1113
<i>for LARC majors only or permission of instructor</i>		

LARC470

Landscape Architecture Seminar

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: LARC321; and LARC341. Corequisite: LARC440. Restriction: Senior standing; and must be in Landscape Architecture program.

A combination of self-directed study, seminar, and lecture formats. An introduction to aspects of research methods, critical analysis, and proposal writing with a focus on urban and community design.

0101	Benjamin Tauber	Seats (Total: 13)
	M 9:00am - 11:50am	PLS 1162

LARC489R Special Topics in Landscape Architecture; Fundamental Graphics

(Perm req)

Credits: 3 Grading Method: Regular

Credit according to time scheduled and organization of course. A lecture and/or studio course organized as an in-depth study of a selected specialization of landscape architecture not covered by existing courses.

Permission of AGNR-Plant Science & Landscape Architecture department; and must be in Landscape Architecture program. Exploration of fundamental graphics used in landscape architecture.

0101	James Westwater	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	PLS 2152
	TuTh 12:30pm - 1:45pm	PLS 2152 Lab

LARC499 Independent Studies in Landscape Architecture

(Perm req)

Credits: 1-4 Grading Method: Regular

Independent studies in landscape architecture including field, studio or library research under the direction of a faculty member.

Contact department for information to register for this course.

LARC620 Graphic Tools for Landscape Representation

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Corequisite: LARC640. Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

This course integrates digital and analog methods of communication and provides an introduction to computer tools and techniques commonly used in landscape architecture practice. Non-drafting computer tools will be used to orient basic digital image capture, manipulation, and presentation formatting. Also includes techniques and application of various media for graphic communication associated with landscape architecture.

0101	James Westwater	Seats (Total: 10)	
	TuTh 8:00am - 9:15am	PLS 1142	
	TuTh 9:30am - 10:45am	PLS 1142	Lab

LARC640

Graduate Studio I

(Perm req)

Credits: 5 Grading Method: Regular,
Audit

Corequisite: LARC620. Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

Principles and techniques of design as applied to shaping the landscape; developing concepts in visual thinking, environmental awareness, and design intervention through studio exercises and projects.

0101	Naomi Sachs	Seats (Total: 10)	
	TuTh 1:00pm - 1:50pm	PLS 1142	
	TuTh 2:00pm - 4:50pm	PLS 1142	Lab

LARC642

Graduate Studio III

(Perm req)

Credits: 5 Grading Method: Regular,
Audit

Prerequisite: LARC641. Corequisite: LARC670. Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

A focus on the interaction of landscape science (hydrology, geology, etc.) with the necessities and mechanisms of human settlements (transportation, economics, etc.) emphasizing innovative and forward thinking solutions to urbanization and ecological problems. It will apply this knowledge to landscape analysis, recreational planning and design, and community development, emphasizing resource management, spatial organization, landscape character, and the physical and social structure of community services. This course will be required for both Track 1 and Track 2 students.

A Partnership for Action Learning in Sustainability (PALS) course where students apply classroom learning to actual community needs.

0101	David Myers	Seats (Total: 10)	
	TuTh 1:00pm - 1:50pm	PLS 2154	
	TuTh 2:00pm - 4:50pm	PLS 2154	Lab

LARC670

Landscape Architecture Theory and Criticism

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

Review and analysis of the body of literature concerning landscape architecture and relationships between humans and both natural and designed environments. Topics may include: rationalism, ethics, aesthetics, social and economic values, postmodernism, feminist, multiculturalism, ecological determinism, preservation/conservation, and sustainability and ecological design. Each week students will lead a debate and discussion on a theoretical issue based on the assigned readings for that week.

0101	Benjamin Tauber	Seats (Total: 10)
	M 9:00am - 11:50am	PLS 1162

LARC699 Independent Studies in Landscape and Architecture

(Perm req)

Credits: 1-3 Grading Method: Regular

Individual Instruction course.

Contact department for information to register for this course.

LARC721 Landscape Construction Methods and Materials

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: LARC720. Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

Basic methods of constructing landscapes and manipulating the appropriate plant and inorganic materials for the creation of ecologically sustainable environments for human use. An examination of the use, properties, and detailing of materials used in landscape construction.

0101	Daniel Straub	Seats (Total: 10)
	W 8:00am - 9:15am	PLS 2154
	W 9:30am - 10:45am	PLS 2154

LARC748 Advanced Special Topics Studio

Credits: 5 Grading Method: Regular,
Audit

Advanced special topics comprehensive landscape architecture studio-exploration will focus on cultural, behavioral and ecological issues in the physical planning and design of urban landscapes.

Advanced special topics comprehensive landscape architecture studio-exploration will focus on cultural, behavioral and ecological issues in the physical planning and design of urban landscapes.

0101	Byoung-Suk Kweon	Seats (Total: 10)	
	TuTh 1:00pm - 1:50pm	PLS 2156	
	TuTh 2:00pm - 4:50pm	PLS 2156	Lab

LARC799

Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular

Development of a terminal thesis on a problem in landscape architecture, designed to demonstrate comprehensive skills and knowledge achieved in the graduate program. The subject will be selected in consultation with an advisor and periodically reviewed with a committee headed by the advisor.

Contact department for information to register for this course.

LASC

Certificate in Latin American Studies

Fall 2019

LASC234

Issues in Latin American Studies I

Credits: 3 Grading Method: Regular CORE: HO, D General Education: DSHS, DSHU, DVUP

Cross-listed with SPAN234, PORT234. Credit only granted for: LASC234, PORT234, or SPAN234.

Interdisciplinary study of major issues in Latin America and the Caribbean, including Latin America's cultural mosaic, migration and urbanization. Democratization and the role of religions. Taught in English.

0101	Sarah Dowman	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	JMZ 2206
0201	Sarah Dowman	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	HBK 0105

LASC250

History of Colonial Latin America

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, DVUP

Cross-listed with HIST250. Credit only granted for: LASC250 or HIST250.

Introductory survey of the history of Latin America from pre-Columbian Indian cultures to the beginning of the wars for independence (ca. 1810), covering cultural, political, social, and economic developments. Major themes include conquest, colonialism, indigenous culture, African slavery, religion, race and ethnicity, and gender ideologies.

0101	David Sartorius	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	BPS 1236

LASC286 Internship in Latin American/Caribbean Studies

(Perm req)

Credits: 1-6 Grading Method: Regular,
Pass-Fail

Prerequisite: LASC234, SPAN234, LASC235, SPAN235, LASC250, HIST250, LASC251, or HIST251; and permission of Latin American Studies Center required. Restriction: Minimum cumulative GPA of 2.5; and cannot have more than 60 credits total. Additional information: The course is primarily intended for students seeking the Certificate in Latin American Studies, but exceptions will be considered for students with educational or career interests which lie in this area. Student internships must be approved by the Director and students must secure an appropriate faculty mentor to supervise the internship course.

Internship experience with an organization that works with or studies Latin American and/or the Caribbean. This is an experiential learning course that provides semester-long training that enriches the student's academic field of study and the LASC Certificate. Students submit a final written report of how the experience ties into their major field of study.

Contact department for information to register for this course.

LASC348E Caribbean Literature in English

Credits: 3 Grading Method: Regular, General Education: DSHU,
Pass-Fail, Audit DVUP

Cross-listed with: ENGL362. Credit only granted for: ENGL362 or LASC348E.

Political and literary traditions that intersect in the fiction, poetry, and drama written in English by Caribbean writers, primarily during the 20th century.

Cross-listed with ENGL362. Credit granted for ENGL362 or LASC348E.

0101	Merle Collins	Seats (Total: 20)
	TuTh 9:30am - 10:45am	TWS 1321

LASC448A Special Topics in Latin American Studies; Caribbean Literature by Women

Credits: 3 Grading Method: Regular

Intensive study of a selected topic related to Latin American Studies.

Prerequisite: two English courses in literature or permission of department. Repeatable to 9 credits, if content differs. Also offered as ENGL448A and WMST448A. Credit only offered for ENGL448A, LASC448A or WMST448A.

0101	Merle Collins	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	TWS 0221

LASC448J Special Topics in Latin American Studies; The Aztecs: Human Sacrifice and Conquest

Credits: 3 Grading Method: Regular

Intensive study of a selected topic related to Latin American Studies.

Cross-listed with HIST429N, PHIL428N, and RELS419J. Credit only granted for HIST429N, PHIL428N, LASC448J, or RELS419J.

0101	James Maffie	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	KEY 0116

LASC458 Senior Capstone Course in Latin American Studies

Credits: 3 Grading Method: Regular

Capstone course for advanced students in the Latin American Studies Certificate Program or other students with appropriate preparation. Interdisciplinary topics will vary each semester.

Contact department for information to register for this course.

LASC486 Internship in Latin American/Caribbean Studies

(Perm req)

Credits: 1-6 Grading Method: Regular,
Pass-Fail

Prerequisite: Student must have completed at least two LASC courses, one of which must be a required/core course (LASC/SPAN234, LASC/SPAN235, LASC/HIST250, or LASC/HIST251); and permission of Latin American Studies Center required. Restriction: Minimum cumulative GPA of 2.5; and must have earned a minimum of 60 credits. Additional information: The course is primarily intended for students seeking the Certificate in Latin American Studies, but exceptions will be considered for students with educational or career interests which lie in this area. Student internships must be approved by the Director, and students must secure an appropriate faculty mentor for the internship course. An internship course will be approved only if a faculty supervisor is available.

Internship experience with an organization that works with or studies Latin American and/or the Caribbean. This is an experiential learning course that provides semester-long training that enriches the student's academic field of study and the LASC Certificate. Students submit a final written report of their experience, including critical analysis of the institutional relevance to their major field of study and to Latin American Studies. Students will also be asked to give an oral presentation.

Contact department for information to register for this course.

LASC499 Independent Study in Latin American Studies

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Independent Study in Latin American Studies.

Contact department for information to register for this course.

LATN

Latin

Fall 2019

LATN120

Intensive Latin

Credits: 4

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Permission of ARHU-Classics department. Restriction: Must not have completed LATN102.

Elements of Latin grammar and vocabulary; elementary reading. The first year's study of Latin compressed into a single semester.

0101	Madeleine Goh	Seats (Total: 20)
	MWF 10:00am - 10:50am	WDS 1130
	W 9:00am - 9:50am	WDS 1130

LATN351

Horace and Catullus

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: LATN201; or students who have taken courses with comparable content may contact the department.

Readings are in Latin.

0101	Katherine Wasdin	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	KEY 0124

LATN488C

Latin Readings; CAESAR

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

The reading of one or more selected Latin authors from antiquity through the Renaissance. Reports.

0101	Eric Adler	Seats (Total: 10)
	Tu 5:00pm - 7:40pm	MMH 1218

LATN488R Latin Readings; ROMAN ELEGY

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The reading of one or more selected Latin authors from antiquity through the Renaissance. Reports.

0101	Katherine Wasdin	Seats (Total: 10)
	M 5:00pm - 7:40pm	MMH 1218

LATN499 Independent Study in Latin Language and Literature

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

LATN688C Special Topics in Latin Literature; CAESAR

Credits: 3 Grading Method: Regular,
Audit

0101	Eric Adler	Seats (Total: 10)
	Tu 5:00pm - 7:40pm	MMH 1218

LATN688R Special Topics in Latin Literature; ROMAN ELEGY

Credits: 3 Grading Method: Regular,
Audit

0101	Katherine Wasdin	Seats (Total: 10)
	M 5:00pm - 7:40pm	MMH 1218

LATN699 Independent Studies in Latin Literature

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

Contact department for information to register for this course.

LATN799 Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

Serving Information Needs

An introduction to the skills necessary to interact directly with individuals through the exploration of user behavior theory, strategies to locate and evaluate information from print and electronic resources, and policies and procedures to ensure that all individuals can become information literate.

0101	Beth St Jean	Seats (Total: 30)
	Tu 2:00pm - 4:45pm	HBK 0115
ML01	Eric Hung	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

Achieving Organizational Excellence

Overview of the principles, practices, and techniques required for effective leadership and management. The innovative strategies, management responsibilities, and skills needed to achieve and sustain high organizational performance in information-based cultural institutions.

0201	Philip Piety	Seats (Total: 30)
	Th 6:00pm - 8:45pm	BPS 1232
ML02	Bruce Dearstyne	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

Collection Development

Prerequisite: LBSC602; or permission of instructor. Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC 644 or LBSC 708G. Formerly: LBSC 708G.

Activities through which library collections are systematically developed and managed are explored, especially the formulation and implementation of written collection development policies. Other specific topics include identification of user needs; collection evaluation; fund allocation among competing departments, subjects, and/or media; selection methods; intellectual freedom; storage alternatives; and cooperative collection development.

0101	Elizabeth De Coster	Seats (Total: 30)
	W 6:00pm - 8:45pm	HBK 0105

LBSC645 Literature and Materials for Children

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of INFO-College of Information Studies.

Survey of literature and other materials for children and youth. Criteria for evaluating and using such materials as they relate to the needs, interests, reading abilities, and other capabilities of young readers.

CT01	Edith Ching	Seats (Total: 15)
	Class time/details on ELMs	ONLINE
ML01	Edith Ching	Seats (Total: 23)
	Class time/details on ELMs	ONLINE

LBSC671 Creating Information Infrastructures

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of INFO-College of Information Studies. Credit only granted for: LBSC671, or LBSC670 and LBSC690.

Foundations of acquiring and managing collections, information structures, indexing and discovery systems needed by information professionals. An introduction to the theoretical concepts, trends, systems, and technologies central to the information field.

0101	Jennifer Proctor	Seats (Total: 30)
	M 6:00pm - 8:45pm	BPS 1232
ML01	Maggie Dull	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

User Instruction

Critical analysis of the rationale, content, and processes of user instruction in library and information settings.

ML01	Abbie Basile	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

Field Study in Archives and Digital Curation

Supervised internship experience in archives or digital curation programs in organizations and institutions.

0101	Kenneth Heger	Seats (Total: 30)
	Th 6:00pm - 8:45pm	HBK 0103

Field Study in Information Service

Supervised internship experience in a library, archive, museum, or other information organization.

ML01	Suzy Wilson	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

Independent Study

Credits: 1-3 Grading Method: Regular,
Audit

Intensive individual study, reading, or research in an area of specialized interest under faculty supervision.

Signed independent study form must be presented to CLIS Admissions Office.

Contact department for information to register for this course.

LBSC724 Public Library Seminar

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: Permission of INFO-College of Information Studies.

Organization, support, and service patterns of public libraries. The public library in national, state, and local contexts.

ML01	Michelle Hamiel	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

LBSC731 Special Collections

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: LBSC602; or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

Management of special collections, whose holdings may include manuscripts (particularly personal papers), non-textual materials, graphical materials, and rare books, with analysis of the custodial and management functions associated with special collections.

ML01	Ashleigh Coren	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

LBSC741 Seminar in School Library Administration

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: INST650; or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

Development, management, and evaluation of school library programs at all levels.

ML01	Jennifer Sturge	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

LBSC742 Collaborative Instructional Design and Evaluation

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: INST650; or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

School librarians' collaborative role in instruction. Systematic design, development, and evaluation of instructional strategies and products for learning.

CT01	Katherine Izsak	Seats (Total: 15)
	Class time/details on ELMs	ONLINE
ML01	Katherine Izsak	Seats (Total: 15)
	Class time/details on ELMs	ONLINE

LBSC749 Internship in School Libraries

Credits: 1-6 Grading Method: Regular,
 Audit

Opportunities to observe and participate in the operation of school libraries at the elementary and secondary levels under the supervision of certified school librarians. Required of all School Library Media certification candidates.

ML01	Renee Hill	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

LBSC751 Research and Teaching Fellowship II

Credits: 1 Grading Method: Regular

Restriction: Permission of INFO-College of Information Studies.

Part of the Research and Teaching Fellowship program, a three-semester teacher training and professional development program in academic libraries. Fellows will complete weekly readings, complete weekly teaching reflections, and begin preparations for the academic job search.

0101	Suzy Wilson	Seats (Total: 10)
	Tu 11:00am - 12:00pm	MCK 4100

LBSC770 Metadata and Tools for Information Professionals

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: LBSC671; or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

Principles, standards, and practices of information representation to facilitate accessing needed information in digital bibliographic environments. Includes exposure to Metadata, XML, RDA/AACR2R, DTDs, MARC, Dublin Core, MODS, ISBN and ISSN, FRBR, FRAD, Classification systems, and Controlled Vocabularies such as LCSH, SEARS, NLM, Getty and ERIC Thesauri, and others.

0101	Bria Parker	Seats (Total: 30)
	Th 6:00pm - 8:45pm	HBK 0123

LBSC791 Designing Principled Inquiry

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: LBSC671, LBSC602, and LBSC631; and additional 9 credits of coursework applied to the MLIS degree. Or permission of instructor. Restriction: Permission of INFO-College of Information Studies.

Critical analysis of roles of information professions and institutions in integrating theory, methods, practice, policies, and values of the field, and applying them to the design of future information systems and services.

ML01	Ursula Gorham-Oscilowski	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

LGBT Lesbian Gay Bisexual Transgender Fall 2019 **Studies**

LGBT200 Introduction to Lesbian, Gay, Bisexual, and Transgender Studies

Credits: 3 Grading Method: Regular, CORE: SB, D General Education: DSHS,
Pass-Fail, Audit DVUP

Credit only granted for: LGBT200.

An interdisciplinary study of the historical and social contexts of personal, cultural and political aspects of LGBT life. Sources from a variety of fields, such as anthropology, history, psychology, sociology, and women's studies, focusing on writings by and about LGBT people.

0101	Melissa Stevens	Seats (Total: 30)
	MWF 8:00am - 8:50am	WDS 1114
0201	Melissa Stevens	Seats (Total: 30)
	MWF 11:00am - 11:50am	ARC 1103

LGBT265 Lesbian, Gay, Bisexual, and Transgender Literatures

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL, D General Education: DSHU, DVUP

Restriction: Must not have completed ENGL265. Cross-listed with ENGL265 . Credit only granted for: ENGL265 or LGBT265.

Exploration of literary and cultural expressions of sexuality and gender. Study of a range of historical periods and literary genres, such as essay, poetry, novel, drama, film. Topics include sexual norms and dissidence, gender identity and expression, the relationship between aesthetic forms and sexual subjectivity. Interpretation of texts particularly through the lens of queer theory. Examination of how sex and gender intersect with other forms of difference, including race and class.

0101	John Macintosh	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	TWS 1106
0201	Konstantinos Pozoukidis	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	TWS 0236

LGBT327 Lesbian, Gay, Bisexual, and Transgender Film and Video

Credits: 3 Grading Method: Regular, Pass-Fail, Audit , D General Education: DSHU, DVUP

Restriction: Junior standing or higher. Cross-listed with: ENGL359F. Credit only granted for: LGBT327 or ENGL359F.

Comparative analysis of forms, themes, and the politics of representation in film and video by and/or about LGBT people.

Cross-listed with ENGL359F. Credit granted for LGBT327 or ENGL359F.

0101	Ivan Ramos	Seats (Total: 30)
	TuTh 5:00pm - 6:15pm	TYD 0101

LGBT350 Lesbian, Gay, Bisexual, and Transgender People and Communication

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP, DVCC

Prerequisite: LGBT200; and permission of LGBT Studies Program.

Study of differences, stereotypes, and values distinguishing LGBT people and of effective means of communicating such differences to non-LGBT people. Emphasis on contemporary LGBT life and on the development of didactic skills. Preparation and presentation of forums on LGBT people; facilitation of workshops in various outreach locations (residence halls, Greek system, classes).

0101	Shige Sakurai, Aqdas Aftab	Seats (Total: 12)
	W 3:30pm - 5:10pm	WDS 1131
	Contact instructor or department for details.	

LGBT386

Lesbian, Gay, Bisexual, and Transgender Community Organization Internship

(Perm req)

Credits: 3-6

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP,
DVCC

Prerequisite: 9 credits in LGBT courses. Restriction: Permission of LGBT Studies Program.

Supervised internship experience with a community organization that expressly serves lesbian, gay, bisexual, and transgender people. Students will be expected to relate course material to experience in an analysis of an organization's activities.

Contact department for information to register for this course.

LGBT448L

Special Topics in Lesbian, Gay, Bisexual, and Transgender Studies; Black Queer Studies

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit, D

General Education: DVUP

In-depth study of particular themes and issues in LGBT studies.

Cross-listed with AASP498Y. Credit granted for LGBT448L or AASP498Y.

0101	Sydney Lewis	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	SKN 1115

LGBT448Y

Special Topics in Lesbian, Gay, Bisexual, and Transgender Studies; Dickinson, Whitman, Erotics, and American Poetry

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit, D

General Education: DVUP

In-depth study of particular themes and issues in LGBT studies.

Cross-listed with ENGL439D and WMST498Y. Credit only granted for ENGL439 D, LGBT448Y, or WMST498Y.

0101	Martha Nell Smith	Seats (Total: 17)
	TuTh 2:00pm - 3:15pm	TWS 0201

LGBT499 **Independent Study**

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit*Directed research and analysis in LGBT Studies on a topic selected by the student.***Contact department for information to register for this course.**

LING **Linguistics****Fall 2019**

LING200 **Introductory Linguistics**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: SB

General Education: DSHS

*Credit only granted for: HESP120 or LING200. Additional information: Does not count toward the Linguistics major and does not fulfill prerequisite requirements for all upper-level courses.**An exploration of the nature of human language, designed for non-majors. Introduction to the basic concepts and methodology of modern linguistic analysis (sound systems, word formation, sentence structure). Additional topics may include: semantics, pragmatics, social aspects of language, dialects, language change, acquisition, writing systems, typology, language universals, comparison with other communication systems, etc.*

0101	Margaret Antonisse MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 30) MMH 1400 MMH 1304	Discussion
0102	Margaret Antonisse MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 30) MMH 1400 MMH 1304	Discussion
0103	Margaret Antonisse MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 30) MMH 1400 MMH 1304	Discussion
0104	Margaret Antonisse MW 1:00pm - 1:50pm F 12:00pm - 12:50pm	Seats (Total: 30) MMH 1400 MMH 1304	Discussion

LING240 **Language and Mind**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: HO

General Education: DSHU

Additional information: Required for Linguistics majors and recommended for students in related fields.

The study of language as a cognitive phenomenon. Focus on mastering the concepts and technical skills required for further courses in linguistics. Ways of representing people's knowledge of their native language, ways in which that knowledge is attained naturally by children, and how it is used in speaking and listening. Additional topics may include: animal communication, language and the brain, language and thought.

0101	Tonia Bleam	Seats (Total: 50)
	MWF 11:00am - 11:50am	SQH 1117

LING248 **Introduction to Laboratory Research in Linguistics**

(Perm req)

Credits: 2-3 Grading Method: Regular

Individualized, collaborative research course aimed at developing skills for laboratory research in language acquisition, sentence processing or neurolinguistics. Learning to conduct research in laboratory linguistics as part of a research team that will create original research in the field.

0101	Jeffrey Lidz	Seats (Total: 15)
	TBA	MMH 1304

LING272 **Biophysics of Language**

Credits: 3 Grading Method: Regular, General Education: DSNS,
Pass-Fail, Audit SCIS

Examines the nature of mental representation of language in the physiology of the mind/brain, how it evolved, how it emerges in learners' minds, and how it decays through injury and illness. Insights from linguistics, cognitive psychology, neuroscience, animal behavior, molecular biology, and biophysics are brought to bear on how an abstract systematic behavior can arise within an animal brain.

Restricted to students in Carillon Communities.

0101	Juan Uriagereka	Seats (Total: 60)
	MWF 11:00am - 11:50am	TWS 1310

LING311 **Syntax I**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: LING240.

Basic concepts, analytical techniques of generative syntax, relation to empirical limits imposed by viewing grammars as representations of a component of human mind. Aspects of current theories.

0101	Tonia Bleam	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	MMH 1304

LING320 **Phonetics**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: Minimum grade of C- in LING200. Recommended: LING240. Additional information: This course counts as a core course for the linguistics major. Only one of Ling320 or HESP403 can be used to count towards the Linguistics major.

Representations and models of acoustic and articulatory phonetics. Develops concepts and skills for description, measurement and scientific analysis of the sound systems of human languages, including various varieties of English.

0101	William Idsardi	Seats (Total: 30)
	TuTh 9:30am - 10:45am	SQH 1105

LING321 **Phonology I**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: LING240.

Properties of sound systems of human languages, basic concepts and analytical techniques of generative phonology. Empirical limits imposed by viewing grammars as cognitive representations. Physiological properties and phonological systems; articulatory phonetics and distinctive feature theory.

0101	Margaret Antonisse	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	MMH 1304

LING410 **Grammar and Meaning**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: Permission of instructor; or LING311.

The basic notions of semantic theory: reference, quantification, scope relations, compositionality, thematic relations, tense and time, etc. The role these notions play in grammars of natural languages. Properties of logical form and relationship with syntax.

0101	Valentine Hacquard	Seats (Total: 30)
	TuTh 9:30am - 10:45am	MMH 1304

LING419B**Topics in Syntax; The Syntax of Silence**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit*Topics vary.*

Prerequisite: LING311 Exploration of syntactic constraints on two types of ellipsis in English : Sluicing and VP-ellipsis. Focus on theoretical questions about the existence of structure in the silence, requirements on identity with an antecedent, and why some kinds of ellipsis can repair island violations.

0101	Rodrigo Ranero Echeverria	Seats (Total: 10)
	TuTh 12:30pm - 1:45pm	MMH 1304

LING419W**Topics in Syntax; Wh-questions Around the World**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit*Topics vary.*

Prerequisite: LING311 Ways that wh-questions can be asked in human languages. Current theories of the nature of dependencies, diagnostics for movement, conclusions about what kinds of syntactic dependencies UG makes available. Phenomena covered: wh-fronting, wh-in-situ, long wh-movement, partial wh-movement, wh-copying, island-insensitive resumption, island-sensitive resumption, echo-questions, and multi-sentence questions.

0101	Aaron Doliana	Seats (Total: 10)
	TuTh 3:30pm - 4:45pm	MMH 1304

LING448**Advanced Laboratory Research in Linguistics**

(Perm req)

Credits: 2-3

Grading Method: Regular

Individualized, collaborative research course aimed at developing skills for laboratory research in language acquisition, sentence processing or neurolinguistics. Conducting a research project in laboratory linguistics as part of a team creating original research relevant to current issues in linguistics.

0101	Jeffrey Lidz	Seats (Total: 15)
	Contact instructor or department for details.	

LING449B**Topics in Psycholinguistics; Acquisition of Unbounded Dependencies**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Critical evaluation of primary research in psycholinguistics. Relating theoretical hypotheses to experimental hypotheses and predictions. Evaluation of experimental results. Emphasis on hands-on experience and experimental methodologies. Specific topics vary.

Prerequisite: LING311 How children detect, represent and process unbounded dependencies (e.g., wh-movement); and how they acquire knowledge of constraints on these dependencies. Students will theories of adult syntax and processing to child language acquisition, and will learn appropriate experimental techniques for probing this knowledge in babies and young children.

0101	Mina Hirzel, Jeffrey Lidz	Seats (Total: 10)
	MW 3:00pm - 4:15pm	MMH 1304

LING499 Directed Studies in Linguistics

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Independent study or research on language under the supervision of a faculty member.

Contact department for information to register for this course.

LING499C Directed Studies in Linguistics; Teaching Assistantship

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Independent study or research on language under the supervision of a faculty member.

Designed for students that will be teaching assistants for LING200.

0101	Margaret Antonisse	Seats (Total: 4)
	Contact instructor or department for details.	
0201	Tonia Bleam	Seats (Total: 4)
	Contact instructor or department for details.	

LING499H Directed Studies in Linguistics

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Independent study or research on language under the supervision of a faculty member.

Contact department for information to register for this course.

LING610 Syntactic Theory

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: LING312.

Intensive introduction to transformational syntax.

0101	Omer Preminger, Howard Lasnik	Seats (Total: 15)	
	Tu 2:00pm - 4:30pm	MMH 1108B	
	Th 2:00pm - 3:30pm	MMH 1108B	Discussion

LING620 Phonological Theory

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: LING322.

Topics in current phonological theory, as they relate to data from various languages. Segmental and prosodic analysis. Autosegmental theory, metrical theory, etc.

0101	Naomi Feldman	Seats (Total: 15)	
	TuTh 9:30am - 10:45am	MMH 1108B	

LING640 Psycholinguistics

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of instructor.

Core graduate course in psycholinguistics, covering leading theoretical approaches and experimental methods in language acquisition, language processing, and neurolinguistics.

0101	Colin Phillips	Seats (Total: 20)	
	MW 12:00pm - 1:30pm	MMH 1108B	

LING659M Structure of a Language

Credits: 3 Grading Method: Regular,
Audit

Detailed examination of a particular language or language family.

0101	Maria Polinsky	Seats (Total: 20)	
	W 3:30pm - 6:30pm	Location: TBA	

LING660 Introduction to Semantics

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of instructor.

Basic concepts and methods of contemporary semantic theory including basic set theory, elementary propositional and predicate calculus, the structure of predicates and propositions, quantification binding. Prepares students for study of more advanced topics in semantics.

Cross-listed with PHIL688T. Credit granted for LING660 or PHIL688T.

0101	Alexander Williams	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	MMH 1108B

LING689 **Independent Study**

Credits: 1-3 Grading Method: Regular,
Audit

Independent studies in grammatical theory.

Contact department for information to register for this course.

LING698 Directed Study; Seminar

Credits: 1-3 Grading Method: Regular, Audit

0101	Howard Lasnik	Seats (Total: 10)
	F 3:00pm - 5:00pm	Location: TBA

LING698T Directed Study; Pedagogy for Linguistics

Credits: 1 Grading Method: Regular, Audit

Required for LING200 Teaching Assistants.

0101	Margaret Antonisse	Seats (Total: 6)
	Contact instructor or department for details.	

LING723 Computational Linguistics I

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: CMSC421 or CMSC422; or students who have taken courses with comparable content may contact the department; or permission of instructor. Cross-listed with: CMSC723, INST735. Credit only granted for: CMSC723, LING723, or INST735. Additional information: CMSC students may only receive PhD Comp. credit for CMSC723 or CMSC823, not both.

Fundamental methods in natural language processing. Topics include: finite-state methods, context-free and extended context-free models of syntax; parsing and semantics interpretation; n-gram and Hidden Markov models, part-of-speech tagging; natural language applications such as machine translation, automatic summarization, and question answering.

0101	Hal Daume	Seats (Total: 90)
	TuTh 3:30pm - 4:45pm	IRB 1116

LING798 Research Papers in Linguistics

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

LING799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

LING848A Seminar in Computational Linguistics; Computational Linguistics and the Cognitive Neuroscience of Language

Credits: 3 Grading Method: Regular,
Audit

Current topics in research in computational linguistics.

0101	Philip Resnik	Seats (Total: 15)
	W 2:00pm - 4:30pm	MMH 1108B

LING879D Seminar in Semantics

Credits: 3 Grading Method: Regular,
Audit

Current topics in research in semantics.

0101	Daniel Goodhue	Seats (Total: 10)
	TuTh 2:00pm - 3:15pm	MMH 1401G

LING888 Doctoral Research Paper

Credits: 1-6 Grading Method: Regular,
Audit

Students will strengthen their abilities to formulate coherent research questions, conduct research and create a publishable piece of work. In addition, the course is part of a set of requirements to advance to doctoral candidacy.

0101	Howard Lasnik	Seats (Total: 3)
	Contact instructor or department for details.	
0201	Norbert Hornstein	Seats (Total: 3)
	Contact instructor or department for details.	
0301	Tonia Bleam	Seats (Total: 3)
	Contact instructor or department for details.	
0401	Jeffrey Lidz	Seats (Total: 3)
	Contact instructor or department for details.	
0501	Andrea Zukowski	Seats (Total: 3)
	Contact instructor or department for details.	
0601	Juan Uriagereka	Seats (Total: 3)
	Contact instructor or department for details.	
0701	Amy Weinberg	Seats (Total: 3)
	Contact instructor or department for details.	
0801	William Idsardi	Seats (Total: 3)
	Contact instructor or department for details.	
0901	Philip Resnik	Seats (Total: 3)
	Contact instructor or department for details.	
1001	Maria Polinsky	Seats (Total: 3)
	Contact instructor or department for details.	
1101	Paul Pietroski	Seats (Total: 3)
	Contact instructor or department for details.	
1201	Colin Phillips	Seats (Total: 3)
	Contact instructor or department for details.	
1301	Margaret Antonisse	Seats (Total: 3)
	Contact instructor or department for details.	

1401	Valentine Hacquard	Seats (Total: 3)
	Contact instructor or department for details.	
1501	Alexander Williams	Seats (Total: 3)
	Contact instructor or department for details.	
1601	Naomi Feldman	Seats (Total: 3)
	Contact instructor or department for details.	
1701	Ellen Lau	Seats (Total: 3)
	Contact instructor or department for details.	
1801	Omer Preminger	Seats (Total: 3)
	Contact instructor or department for details.	

LING889 Directed Research

Credits: 1-8 Grading Method: Regular,
Audit

Contact department for information to register for this course.

LING896 Research Paper in Minor Area

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: LING888.

This course is designed to strengthen the students' ability to do research in a minor area of expertise, and to help them create a publishable piece. In addition, the course constitutes part of a set of requirements to advance to doctoral candidacy.

Contact department for information to register for this course.

LING898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

LING899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

MATH003**Developmental Mathematics**

Credits: 3

Grading Method: Sat-Fail

A review of Intermediate High School Algebra intended for students preparing for one of the credit bearing Fundamental Studies Math Courses. It is taught in special computer labs using a self-paced computer program. The curriculum will be geared toward the student's level of algebra skills and eventual goals. There is a special fee for the course that may be applied in addition to the regular tuition charge. Students should refer to the schedule of classes for details on fees as they apply to a particular semester. The course does not carry any credit toward any degree at the University. The course is repeatable. Topics will be chosen from exponents, polynomials, linear equations, quadratic equations as well as polynomial, rational, exponential and logarithm functions and elementary probability or statistics, depending on the student.

There is a special fee for this class in addition to the regular tuition charge.

0102	Matthew Wilson	Seats (Total: 25)
	MWF 8:00am - 9:50am	PHY 4220
<i>Restricted to students in the uTERP Program only.</i>		
0201	Charles Daly	Seats (Total: 26)
	MWF 10:00am - 11:50am	CEN 0200
0202	Charles Daly	Seats (Total: 25)
	MWF 10:00am - 11:50am	PHY 4220
0601	Colleen Terpos	Seats (Total: 25)
	TuTh 8:00am - 10:45am	CEN 0200
0602	Colleen Terpos	Seats (Total: 25)
	TuTh 8:00am - 10:45am	PHY 4220
0701	Colleen Terpos	Seats (Total: 26)
	TuTh 11:00am - 1:45pm	CEN 0200
0702	Colleen Terpos	Seats (Total: 25)
	TuTh 11:00am - 1:45pm	PHY 4220
FC01	Jack Baker	Seats (Total: 40)
	MW 6:00pm - 8:45pm	CEN 0200
<i>Restricted to students in Freshman Connection.</i>		

MATH007**Algebra for MATH 107**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A review of Intermediate High School Algebra intended for students preparing for MATH107. It is taught 5 days per week for the first 5 weeks, then leads directly into a special section of MATH107, the same semester, which also meets 5 days per week. Continuation in MATH107 is conditional on the student passing the MATHEMATICS PLACEMENT EXAM at the appropriate level. Topics include linear equations, linear inequalities, operations on polynomials, factoring, solutions of quadratic equations, as well as exponential and logarithm functions. MATH007 does not carry any credit toward any degree at the University, nor is it graded. It leads to either MATH107 or MATH003, both of which are graded.

1202	Debra Franklin	Seats (Total: 18)
	MTuWThF 11:00am - 11:50am	MTH B0431
1301	Debra Franklin	Seats (Total: 18)
	MTuWThF 1:00pm - 1:50pm	MTH 0407

MATH013

Algebra for MATH 113

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A review of Intermediate High School Algebra intended for students preparing for MATH113. It is taught 5 days per week for the first 5 weeks, then leads directly into a special section of MATH113, the same semester, which also meets 5 days per week. Continuation in MATH113 is conditional on the student passing the MATHEMATICS PLACEMENT EXAM at the appropriate level. Topics include exponents, polynomials, linear equations, quadratic equations, as well as polynomial, rational, exponential, logarithm functions, and trigonometry. MATH013 does not carry any credit toward any degree at the University, nor is it graded. It leads directly to MATH113 (or MATH110), or MATH003, all of which are graded.

1101	Santuria Orsetti	Seats (Total: 22)
	MTuWThF 9:00am - 9:50am	MTH 0402
1201	Santuria Orsetti	Seats (Total: 22)
	MTuWThF 11:00am - 11:50am	MTH 0402
1301	Barbara Michelato	Seats (Total: 22)
	MTuWThF 12:00pm - 12:50pm	MTH 0402
1401	Barbara Michelato	Seats (Total: 24)
	MTuWThF 1:00pm - 1:50pm	MTH 0402

MATH015

Algebra for MATH 115

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A review of Intermediate High School Algebra intended for students preparing for MATH115. It is taught 5 days per week for the first 5 weeks, then leads directly into a special section of MATH115, the same semester, which also meets 5 days per week. Continuation in MATH115 is conditional on the student passing the MATHEMATICS PLACEMENT EXAM at the appropriate level. Topics include exponents, polynomials, linear equations in one and two variables, quadratic equations, as well as polynomial, rational, exponential, logarithm functions and trigonometry. MATH015 does not carry any credit toward any degree at the University, nor is it graded. It leads directly to MATH115 (or MATH111 or MATH113 or MATH110), or MATH003, all of which are graded.

1101	Tessa Thorsen MTuWThF 9:00am - 9:50am	Seats (Total: 20) ATL 1109
1201	Danielle Middlebrooks MTuWThF 11:00am - 11:50am	Seats (Total: 20) ATL 1109
1301	Ben Bezejouh MTuWThF 12:00pm - 12:50pm	Seats (Total: 20) ATL 1109
1401	Ben Bezejouh MTuWThF 1:00pm - 1:50pm	Seats (Total: 20) ATL 1109

MATH107 Introduction to Math Modeling and Probability

Credits: 3 Grading Method: Regular, General Education: FSMA
Pass-Fail, Audit

Prerequisite: Must have math eligibility of Math 107 or higher; and math eligibility is based on Math Placement Exam or successful completion of MATH003 with appropriate eligibility. Restriction: Not open to students majoring in mathematics, engineering, business, life sciences, and the physical sciences;; and must not have completed MATH120, MATH130, MATH136, or MATH140; and must not have completed MATH220; and must not have completed any MATH or STAT course with a prerequisite of MATH120, MATH130, MATH136, MATH140 or MATH220. Credit only granted for: STAT100, MATH107, MATH110, MATH111, MATH112, or MATH113. Formerly: Math 110 and Math 111. Additional information: Students who have credits for MATH107 may not also receive credits for STAT100, MATH110, MATH 111, MATH112, or MATH113.

A goal is to convey the power of mathematics as shown by a variety of problems which can be modeled and solved by quantitative means. Also included is an introduction to probability. Topics include data analysis, equations, systems of equations, inequalities, elementary linear programming, Venn diagrams, counting, basic probability, permutations, combinations, tree diagrams, standard normal and normal distributions. The mathematics of finance is covered. The course includes problem solving and decision making in economics, management, and social sciences.

0101	Mirna Pinsky MWF 11:00am - 11:50am	Seats (Total: 30) MTH B0425
0201	Mirna Pinsky MWF 12:00pm - 12:50pm	Seats (Total: 30) MTH B0425
0301	Samuel Dipasqua MWF 1:00pm - 1:50pm	Seats (Total: 30) MTH B0425
0401	Samuel Dipasqua MWF 2:00pm - 2:50pm	Seats (Total: 30) MTH B0425
0402	Kyle Liss MWF 2:00pm - 2:50pm	Seats (Total: 30) MTH B0423
1202	Debra Franklin MTuWThF 11:00am - 11:50am	Seats (Total: 18) MTH B0431
FC01	Julie Daberkow MW 3:00pm - 4:15pm	Seats (Total: 30) MTH 0407

MATH113

College Algebra and Trigonometry

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: FSMA

Prerequisite: Must have math eligibility of MATH113 or higher; and math eligibility is based on the Math Placement Exam or the successful completion of MATH 003 with appropriate eligibility. Restriction: Must not have completed MATH115, MATH120, MATH130, MATH136, or MATH140; and must not have completed any course with a prerequisite of MATH120, MATH130, MATH136, MATH140 or MATH220; and must not have completed MATH112 or MATH220. Credit only granted for: Students who have credits for MATH113 may not also receive credits for MATH107, MATH110, MATH112, or MATH115.

Topics include elementary functions including graphs and applications of: polynomial, rational, exponential, and logarithmic functions. Systems of equations and applications. Trigonometric functions: angle and radian measure, graphs and applications.

0101	Brandon Alexander MWF 10:00am - 10:50am	Seats (Total: 30) MTH B0427
0102	Blake Fritz MWF 10:00am - 10:50am	Seats (Total: 33) MTH 0304

0103	Zachary Greenberg MWF 10:00am - 10:50am	Seats (Total: 30) MTH 0407
0104	Brooke Herzog MWF 10:00am - 10:50am	Seats (Total: 30) MTH 0409
0201	Brandon Alexander MWF 11:00am - 11:50am	Seats (Total: 30) MTH B0427
0202	Blake Fritz MWF 11:00am - 11:50am	Seats (Total: 33) MTH 0304
0203	Zachary Greenberg MWF 11:00am - 11:50am	Seats (Total: 30) MTH 0407
0204	Brooke Herzog MWF 11:00am - 11:50am	Seats (Total: 30) MTH 0409
0301	Eric Oden MWF 3:00pm - 3:50pm	Seats (Total: 30) MTH B0427
0302	Yaqi Wu MWF 3:00pm - 3:50pm	Seats (Total: 32) MTH 0105
0401	Eric Oden MWF 4:00pm - 4:50pm	Seats (Total: 30) MTH B0427
0402	Yaqi Wu MWF 4:00pm - 4:50pm	Seats (Total: 32) MTH 0105
1101	Santuria Orsetti MTuWThF 9:00am - 9:50am	Seats (Total: 20) MTH 0402
1201	Santuria Orsetti MTuWThF 11:00am - 11:50am	Seats (Total: 22) MTH 0402
FC01	Jocelyn Menecio TuTh 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 33) CHM 2201

FC02	Amador Jomud TuTh 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 33) MTH 0103
FC03	Jocelyn Menecio TuTh 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 33) CHM 2201
FC04	Amador Jomud TuTh 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 33) MTH 0103
FC05	Darcy Conant MW 3:00pm - 4:15pm	Seats (Total: 33) PLS 1130
FC06	Darcy Conant MW 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 33) PLS 1130

MATH115

Precalculus

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: FSMA

Prerequisite: Must have math eligibility of MATH115 or higher; and math eligibility is based on the Math Placement Exam or the successful completion of MATH003 with appropriate eligibility. Or MATH113. Restriction: Must not have completed MATH140; and must not have completed any MATH or STAT course with a prerequisite of MATH140. Credit only granted for: Students who have credits for MATH115 may not also receive credits for MATH112 or MATH113.

Preparation for MATH120, MATH130 or MATH140. Elementary functions and graphs: polynomials, rational functions, exponential and logarithmic functions, trigonometric functions. Algebraic techniques preparatory for calculus.

All sections will require the use of a TI graphics calculator. Instructor will use a TI-83 or a TI-83+, TI 84, TI 84+, TI 86, or TI 89 calculator.

0111	Raluca Rosca MWF 9:00am - 9:50am MWF 10:00am - 10:50am	Seats (Total: 27) ESJ 0202 PHY 4207 Lab
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0121	Raluca Rosca MWF 9:00am - 9:50am MWF 11:00am - 11:50am	Seats (Total: 27) ESJ 0202 PHY 4207 Lab
0131	Raluca Rosca MWF 9:00am - 9:50am MWF 12:00pm - 12:50pm	Seats (Total: 27) ESJ 0202 PHY 4207 Lab
0141	Raluca Rosca MWF 9:00am - 9:50am MWF 1:00pm - 1:50pm	Seats (Total: 27) ESJ 0202 PHY 4207 Lab
0151	Raluca Rosca MWF 9:00am - 9:50am MWF 2:00pm - 2:50pm	Seats (Total: 27) ESJ 0202 PHY 4207 Lab
0161	Raluca Rosca MWF 9:00am - 9:50am MWF 3:00pm - 3:50pm	Seats (Total: 27) ESJ 0202 PHY 4207 Lab
0171	Raluca Rosca MWF 9:00am - 9:50am TuTh 9:30am - 10:45am	Seats (Total: 27) ESJ 0202 PHY 4207 Lab
0181	Raluca Rosca MWF 9:00am - 9:50am TuTh 11:00am - 12:15pm	Seats (Total: 27) ESJ 0202 PHY 4207 Lab
0191	Raluca Rosca MWF 9:00am - 9:50am TuTh 12:30pm - 1:45pm	Seats (Total: 27) ESJ 0202 PHY 4207 Discussion
0192	Raluca Rosca MWF 9:00am - 9:50am TuTh 2:00pm - 3:15pm	Seats (Total: 27) ESJ 0202 PHY 4207 Discussion
FC01	William Schildknecht MW 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 33) MTH 0106

FC02	Weikun Wang MW 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 33) MTH 0305
FC03	Jocelyn Menecio MW 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 33) MMH 1304
FC04	William Schildknecht MW 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 33) MTH 0304

MATH120

Elementary Calculus I

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: FSAR, FSMA

Prerequisite: 1 course with a minimum grade of C- from (MATH112, MATH113, MATH115). Or must have math eligibility of MATH120 or higher; and math eligibility is based on the Math Placement Test.

Restriction: Not open to students majoring in mathematics, engineering, the biological sciences, biochemistry, chemistry, or the physical sciences. Credit only granted for: MATH120, MATH130, MATH136, MATH140, or MATH220. Formerly: MATH220.

Basic ideas of differential and integral calculus, with emphasis on elementary techniques of differentiation and applications.

0111	Kendall Williams MWF 9:00am - 9:50am Th 8:00am - 8:50am	Seats (Total: 29) SKN 0200 MTH 0401	Discussion
0112	Kendall Williams MWF 9:00am - 9:50am Th 8:00am - 8:50am	Seats (Total: 30) SKN 0200 MTH 0411	Discussion
0121	Kendall Williams MWF 9:00am - 9:50am Th 9:30am - 10:20am	Seats (Total: 29) SKN 0200 MTH 0401	Discussion
0122	Kendall Williams MWF 9:00am - 9:50am Th 9:30am - 10:20am	Seats (Total: 29) SKN 0200 MTH 0411	Discussion

0131	Kendall Williams MWF 9:00am - 9:50am Th 11:00am - 11:50am	Seats (Total: 30) SKN 0200 MTH 0401	Discussion
0132	Kendall Williams MWF 9:00am - 9:50am Th 11:00am - 11:50am	Seats (Total: 30) SKN 0200 MTH 0411	Discussion
0141	Kendall Williams MWF 9:00am - 9:50am Th 12:30pm - 1:20pm	Seats (Total: 29) SKN 0200 MTH 0401	Discussion
0142	Kendall Williams MWF 9:00am - 9:50am Th 12:30pm - 1:20pm	Seats (Total: 29) SKN 0200 MTH 0411	Discussion
0211	Agnieszka Zelerowicz TuTh 9:30am - 10:45am W 8:00am - 8:50am	Seats (Total: 29) ARM 0131 MTH 0401	Discussion
0221	Agnieszka Zelerowicz TuTh 9:30am - 10:45am W 9:00am - 9:50am	Seats (Total: 28) ARM 0131 MTH 0401	Discussion
0231	Agnieszka Zelerowicz TuTh 9:30am - 10:45am W 12:00pm - 12:50pm	Seats (Total: 29) ARM 0131 MTH 0401	Discussion
0232	Agnieszka Zelerowicz TuTh 9:30am - 10:45am W 12:00pm - 12:50pm	Seats (Total: 28) ARM 0131 MTH 0411	Discussion
0241	Agnieszka Zelerowicz TuTh 9:30am - 10:45am W 1:00pm - 1:50pm	Seats (Total: 28) ARM 0131 MTH 0401	Discussion
0242	Agnieszka Zelerowicz TuTh 9:30am - 10:45am W 1:00pm - 1:50pm	Seats (Total: 28) ARM 0131 MTH 0411	Discussion

0251	Agnieszka Zelerowicz TuTh 9:30am - 10:45am W 2:00pm - 2:50pm	Seats (Total: 29) ARM 0131 MTH 0401	Discussion
0252	Agnieszka Zelerowicz TuTh 9:30am - 10:45am W 2:00pm - 2:50pm	Seats (Total: 28) ARM 0131 MTH 0411	Discussion
0311	Lawrence Washington TuTh 11:00am - 12:15pm F 8:00am - 8:50am	Seats (Total: 32) ESJ 0202 ESJ 1309	Discussion
0321	Lawrence Washington TuTh 11:00am - 12:15pm F 9:00am - 9:50am	Seats (Total: 32) ESJ 0202 ESJ 1309	Discussion
0331	Lawrence Washington TuTh 11:00am - 12:15pm F 12:00pm - 12:50pm	Seats (Total: 32) ESJ 0202 ESJ 1215	Discussion
0332	Lawrence Washington TuTh 11:00am - 12:15pm F 12:00pm - 12:50pm	Seats (Total: 32) ESJ 0202 ESJ 1215	Discussion
0341	Lawrence Washington TuTh 11:00am - 12:15pm F 1:00pm - 1:50pm	Seats (Total: 32) ESJ 0202 ESJ 1215	Discussion
0342	Lawrence Washington TuTh 11:00am - 12:15pm F 1:00pm - 1:50pm	Seats (Total: 32) ESJ 0202 ESJ 1215	Discussion
0351	Lawrence Washington TuTh 11:00am - 12:15pm F 2:00pm - 2:50pm	Seats (Total: 32) ESJ 0202 ESJ 1215	Discussion
0352	Lawrence Washington TuTh 11:00am - 12:15pm F 2:00pm - 2:50pm	Seats (Total: 30) ESJ 0202 ESJ 1215	Discussion

0411	Timothy Pilachowski TuTh 12:30pm - 1:45pm M 8:00am - 8:50am	Seats (Total: 29) ARM 0135 MTH 0401	Discussion
0421	Timothy Pilachowski TuTh 12:30pm - 1:45pm M 9:00am - 9:50am	Seats (Total: 29) ARM 0135 MTH 0401	Discussion
0431	Timothy Pilachowski TuTh 12:30pm - 1:45pm M 11:00am - 11:50am	Seats (Total: 29) ARM 0135 MTH 0305	Discussion
0432	Timothy Pilachowski TuTh 12:30pm - 1:45pm M 11:00am - 11:50am	Seats (Total: 29) ARM 0135 MTH 0411	Discussion
0441	Timothy Pilachowski TuTh 12:30pm - 1:45pm M 2:00pm - 2:50pm	Seats (Total: 29) ARM 0135 MTH 0401	Discussion
0442	Timothy Pilachowski TuTh 12:30pm - 1:45pm M 2:00pm - 2:50pm	Seats (Total: 29) ARM 0135 MTH 0411	Discussion
0451	Timothy Pilachowski TuTh 12:30pm - 1:45pm M 3:00pm - 3:50pm	Seats (Total: 29) ARM 0135 MTH 0401	Discussion
0452	Timothy Pilachowski TuTh 12:30pm - 1:45pm M 3:00pm - 3:50pm	Seats (Total: 29) ARM 0135 MTH 0411	Discussion
FC01	Jack Baker MW 4:30pm - 5:45pm	Seats (Total: 35) PHY 1402	
FC02	Ramon Braza MW 4:30pm - 5:45pm	Seats (Total: 34) MTH 0101	
FC03	Ben Bezejouh MW 6:00pm - 7:15pm	Seats (Total: 35) MTH 0106	

FC04	Ramon Braza	Seats (Total: 35)
	MW 6:00pm - 7:15pm	MTH 0201

MATH121 Elementary Calculus II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH120, MATH130, MATH136, or MATH140; or must have completed MATH220. Restriction: Not open to students majoring in mathematics, engineering, the biological sciences, biochemistry, chemistry, or the physical sciences. Credit only granted for: MATH121, MATH131, MATH141, or MATH221. Formerly: MATH 221.

Differential and integral calculus, with emphasis on elementary techniques of integration and applications.

0101	Haoran Li	Seats (Total: 20)
	MWF 12:00pm - 12:50pm	MTH 1311
0201	Haoran Li	Seats (Total: 20)
	MWF 1:00pm - 1:50pm	MTH 1311

MATH135 Discrete Mathematics for Life Sciences

Credits: 4 Grading Method: Regular, General Education: FSAR,
Pass-Fail, Audit FSMA

Prerequisite: Minimum grade of C- in MATH115; or must have math eligibility of MATH140 or higher; and math eligibility is based on the Math Placement Test. Restriction: Must be in a major in CMNS-Biological Sciences UG Program; and not open to students majoring in mathematics, engineering, or the physical sciences.

Basic discrete mathematics, with emphasis on relevant models and techniques to the life sciences.

0111	Casey Cremins	Seats (Total: 28)
	TuTh 9:30am - 10:45am	ARM 0126
	WF 8:00am - 8:50am	MTH 0105 Discussion
0112	Casey Cremins	Seats (Total: 28)
	TuTh 9:30am - 10:45am	ARM 0126
	WF 8:00am - 8:50am	MTH 0305 Discussion

0121	Casey Cremins TuTh 9:30am - 10:45am WF 9:00am - 9:50am	Seats (Total: 28) ARM 0126 MTH 0105	Discussion
0122	Casey Cremins TuTh 9:30am - 10:45am WF 9:00am - 9:50am	Seats (Total: 28) ARM 0126 MTH 0305	Discussion
0131	Casey Cremins TuTh 9:30am - 10:45am WF 10:00am - 10:50am	Seats (Total: 28) ARM 0126 MTH 0105	Discussion
0132	Casey Cremins TuTh 9:30am - 10:45am WF 10:00am - 10:50am	Seats (Total: 28) ARM 0126 MTH 0305	Discussion
0141	Casey Cremins TuTh 9:30am - 10:45am WF 11:00am - 11:50am	Seats (Total: 28) ARM 0126 MTH 0105	Discussion
0142	Casey Cremins TuTh 9:30am - 10:45am WF 11:00am - 11:50am	Seats (Total: 28) ARM 0126 MTH 0305	Discussion
0211	Tamas Darvas TuTh 2:00pm - 3:15pm MW 8:00am - 8:50am	Seats (Total: 28) ARM 0131 MTH 0405	Discussion
0212	Tamas Darvas TuTh 2:00pm - 3:15pm MW 8:00am - 8:50am	Seats (Total: 28) ARM 0131 MTH 0403	Discussion
0221	Tamas Darvas TuTh 2:00pm - 3:15pm MW 9:00am - 9:50am	Seats (Total: 28) ARM 0131 MTH 0405	Discussion
0222	Tamas Darvas TuTh 2:00pm - 3:15pm MW 9:00am - 9:50am	Seats (Total: 28) ARM 0131 MTH 0403	Discussion

0231	Tamas Darvas	Seats (Total: 28)	
	TuTh 2:00pm - 3:15pm	ARM 0131	
	MW 11:00am - 11:50am	MTH 0405	Discussion
0241	Tamas Darvas	Seats (Total: 28)	
	TuTh 2:00pm - 3:15pm	ARM 0131	
	MW 12:00pm - 12:50pm	MTH 0405	Discussion

MATH136

Calculus for Life Sciences

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH135. Restriction: Must be in a major in CMNS-Biological Sciences UG Program. Credit only granted for: MATH120, MATH130, MATH136, or MATH140.

Continuation of MATH135, including basic ideas of differential integral calculus, with emphasis on elementary techniques and applications to the life sciences.

0111	Joel Cohen	Seats (Total: 25)	
	TuTh 11:00am - 12:15pm	ARM 0135	
	MW 9:00am - 9:50am	MTH 0101	Discussion
0121	Joel Cohen	Seats (Total: 25)	
	TuTh 11:00am - 12:15pm	ARM 0135	
	MW 10:00am - 10:50am	MTH 0101	Discussion
0131	Joel Cohen	Seats (Total: 25)	
	TuTh 11:00am - 12:15pm	ARM 0135	
	MW 1:00pm - 1:50pm	MTH 0302	Discussion
0141	Joel Cohen	Seats (Total: 25)	
	TuTh 11:00am - 12:15pm	ARM 0135	
	MW 2:00pm - 2:50pm	MTH 0302	Discussion

MATH140

Calculus I

Credits: 4 Grading Method: Regular, CORE: MS General Education: FSAR,
Pass-Fail, Audit FSMA

Prerequisite: Minimum grade of C- in MATH115. Or must have math eligibility of MATH140 or higher; and math eligibility is based on the Math Placement Test. Credit only granted for: MATH120, MATH130, MATH136, MATH140 or MATH220.

Introduction to calculus, including functions, limits, continuity, derivatives and applications of the derivative, sketching of graphs of functions, definite and indefinite integrals, and calculation of area. The course is especially recommended for science, engineering and mathematics majors.

All sections will require the use of a TI graphics calculator. Instructor will use a TI-83, TI-83+, TI 84, TI 84+, TI 86, or TI 89 calculator. Emphasis on student interaction in groups, including team approach to solving calculus based problems. There will be 3 one-hour lectures and 2 eighty-minute workshops each week with enhanced assistance and support for students.

0111	Denny Gulick MWF 8:00am - 8:50am TuTh 8:00am - 9:20am	Seats (Total: 23) PHY 1412 MTH 1308	Discussion
0112	Denny Gulick MWF 8:00am - 8:50am TuTh 8:00am - 9:20am	Seats (Total: 23) PHY 1412 MTH 1311	Discussion
0113	Denny Gulick MWF 8:00am - 8:50am TuTh 8:00am - 9:20am	Seats (Total: 23) PHY 1412 MTH 1313	Discussion
0121	Denny Gulick MWF 8:00am - 8:50am TuTh 9:30am - 10:50am	Seats (Total: 24) PHY 1412 MTH 1308	Discussion
0122	Denny Gulick MWF 8:00am - 8:50am TuTh 9:30am - 10:50am	Seats (Total: 24) PHY 1412 MTH 1311	Discussion
0123	Denny Gulick MWF 8:00am - 8:50am TuTh 9:30am - 10:50am	Seats (Total: 23) PHY 1412 MTH 1313	Discussion
0131	Denny Gulick MWF 8:00am - 8:50am TuTh 11:00am - 12:20pm	Seats (Total: 23) PHY 1412 MTH 1308	Discussion
0132	Denny Gulick MWF 8:00am - 8:50am TuTh 11:00am - 12:20pm	Seats (Total: 23) PHY 1412 MTH 1311	Discussion

0211	Timothy Pilachowski MWF 10:00am - 10:50am TuTh 11:00am - 12:20pm	Seats (Total: 25) ESJ 0202 ESJ 1215	Discussion
0212	Timothy Pilachowski MWF 10:00am - 10:50am TuTh 11:00am - 12:20pm	Seats (Total: 25) ESJ 0202 ESJ 1215	Discussion
0213	Timothy Pilachowski MWF 10:00am - 10:50am TuTh 11:00am - 12:20pm	Seats (Total: 25) ESJ 0202 ESJ 1215	Discussion
0221	Timothy Pilachowski MWF 10:00am - 10:50am TuTh 12:30pm - 1:50pm	Seats (Total: 25) ESJ 0202 ESJ 1215	Discussion
0222	Timothy Pilachowski MWF 10:00am - 10:50am TuTh 12:30pm - 1:50pm	Seats (Total: 25) ESJ 0202 ESJ 1215	Discussion
0223	Timothy Pilachowski MWF 10:00am - 10:50am TuTh 12:30pm - 1:50pm	Seats (Total: 25) ESJ 0202 ESJ 1215	Discussion
0231	Timothy Pilachowski MWF 10:00am - 10:50am TuTh 2:00pm - 3:20pm	Seats (Total: 25) ESJ 0202 ESJ 1215	Discussion
0232	Timothy Pilachowski MWF 10:00am - 10:50am TuTh 2:00pm - 3:20pm	Seats (Total: 25) ESJ 0202 ESJ 1215	Discussion
0311	Jingren Chi MWF 11:00am - 11:50am TuTh 11:00am - 12:20pm	Seats (Total: 23) ARM 0131 MTH 0409	Discussion
0312	Jingren Chi MWF 11:00am - 11:50am TuTh 11:00am - 12:20pm	Seats (Total: 23) ARM 0131 MTH 0305	Discussion

0321	Jingren Chi MWF 11:00am - 11:50am TuTh 12:30pm - 1:50pm	Seats (Total: 24) ARM 0131 MTH 0409	Discussion
0322	Jingren Chi MWF 11:00am - 11:50am TuTh 12:30pm - 1:50pm	Seats (Total: 24) ARM 0131 MTH 0305	Discussion
0331	Jingren Chi MWF 11:00am - 11:50am TuTh 2:00pm - 3:20pm	Seats (Total: 23) ARM 0131 MTH 0409	Discussion
0332	Jingren Chi MWF 11:00am - 11:50am TuTh 2:00pm - 3:20pm	Seats (Total: 23) ARM 0131 MTH 0305	Discussion
0411	Stefan Doboszczak MWF 12:00pm - 12:50pm TuTh 9:30am - 10:50am	Seats (Total: 23) ARM 0131 MTH 0102	Discussion
0412	Stefan Doboszczak MWF 12:00pm - 12:50pm TuTh 9:30am - 10:50am	Seats (Total: 24) ARM 0131 MTH 0105	Discussion
0421	Stefan Doboszczak MWF 12:00pm - 12:50pm TuTh 11:00am - 12:20pm	Seats (Total: 23) ARM 0131 MTH 0102	Discussion
0422	Stefan Doboszczak MWF 12:00pm - 12:50pm TuTh 11:00am - 12:20pm	Seats (Total: 23) ARM 0131 MTH 0105	Discussion
0431	Stefan Doboszczak MWF 12:00pm - 12:50pm TuTh 2:00pm - 3:20pm	Seats (Total: 23) ARM 0131 MTH 0102	Discussion
0432	Stefan Doboszczak MWF 12:00pm - 12:50pm TuTh 2:00pm - 3:20pm	Seats (Total: 23) ARM 0131 MTH 0105	Discussion

0511	Steven Chadwick MWF 1:00pm - 1:50pm TuTh 8:00am - 9:20am	Seats (Total: 23) PHY 1412 MTH 0102	Discussion
0512	Steven Chadwick MWF 1:00pm - 1:50pm TuTh 8:00am - 9:20am	Seats (Total: 23) PHY 1412 MTH 0103	Discussion
0521	Steven Chadwick MWF 1:00pm - 1:50pm TuTh 9:30am - 10:50am	Seats (Total: 23) PHY 1412 MTH 0101	Discussion
0522	Steven Chadwick MWF 1:00pm - 1:50pm TuTh 9:30am - 10:50am	Seats (Total: 23) PHY 1412 MTH 0103	Discussion
0531	Steven Chadwick MWF 1:00pm - 1:50pm TuTh 11:00am - 12:20pm	Seats (Total: 23) PHY 1412 MTH 0101	Discussion
0532	Steven Chadwick MWF 1:00pm - 1:50pm TuTh 11:00am - 12:20pm	Seats (Total: 23) PHY 1412 MTH 0103	Discussion
FC01	Mestiyage Gunatilleka MWTh 3:00pm - 4:15pm F 1:00pm - 2:15pm	Seats (Total: 33) ARM 0135 MTH 0305	Discussion
FC02	Mestiyage Gunatilleka MWTh 3:00pm - 4:15pm F 1:00pm - 2:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 34) ARM 0135 MTH 0304	Discussion
FC03	Mestiyage Gunatilleka MWTh 3:00pm - 4:15pm F 9:30am - 10:45am <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 34) ARM 0135 MTH 0101	Discussion

FC04	Mestiyage Gunatilleka	Seats (Total: 30)	
	MWTh 3:00pm - 4:15pm	ARM 0135	
	F 9:30am - 10:45am	MTH 0403	Discussion
	<i>Restricted to students in Freshmen Connection.</i>		
FC05	Mestiyage Gunatilleka	Seats (Total: 34)	
	MWTh 3:00pm - 4:15pm	ARM 0135	
	F 2:00pm - 3:15pm	MTH 0201	Discussion
	<i>Restricted to students in Freshmen Connection.</i>		
FC06	Mestiyage Gunatilleka	Seats (Total: 33)	
	MWTh 3:00pm - 4:15pm	ARM 0135	
	F 2:00pm - 3:15pm	MTH 0103	Discussion
	<i>Restricted to students in Freshmen Connection.</i>		
FC07	Craig Schlenoff	Seats (Total: 34)	
	MWTh 4:30pm - 5:45pm	MTH 0201	

MATH140H Calculus I

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: MS General Education: FSAR, FSMA

Prerequisite: Minimum grade of C- in MATH115. Or must have math eligibility of MATH140 or higher; and math eligibility is based on the Math Placement Test. Credit only granted for: MATH120, MATH130, MATH136, MATH140 or MATH220.

Introduction to calculus, including functions, limits, continuity, derivatives and applications of the derivative, sketching of graphs of functions, definite and indefinite integrals, and calculation of area. The course is especially recommended for science, engineering and mathematics majors.

For general honors students only. Offered fall only. All sections will require the use of a TI graphics calculator. Instructor will use a TI-83 TI-83+, TI 84, TI 84+, TI 86, or TI 89 calculator.

0101	Steven Chadwick	Seats (Total: 20)
	MF 10:00am - 10:50am	MTH 1313
	W 10:00am - 11:50am	MTH 1313
0201	Xiumin Du	Seats (Total: 20)
	WF 1:00pm - 1:50pm	MTH 0101
	M 1:00pm - 2:50pm	MTH 0101

MATH141**Calculus II**

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit CORE: MS

Prerequisite: Minimum grade of C- in MATH140. Or 1 course with a minimum grade of B- from (MATH130, MATH136); and permission of CMNS-Mathematics department. Credit only granted for: MATH121, MATH131, MATH141, or MATH221.

Continuation of MATH140, including techniques of integration, improper integrals, applications of integration (such as volumes, work, arc length, moments), inverse functions, exponential and logarithmic functions, sequences and series.

All sections will require the use of a TI graphics calculator. Instructor will use a TI-83, TI-83+, TI 84, TI 84+, TI 86, or TI 89 calculator.

0111	Brian Smithling MWF 10:00am - 10:50am TuTh 8:00am - 8:50am	Seats (Total: 25) BRB 1101 MTH 0306	Discussion
0112	Brian Smithling MWF 10:00am - 10:50am TuTh 8:00am - 8:50am	Seats (Total: 25) BRB 1101 MTH 0304	Discussion
0121	Brian Smithling MWF 10:00am - 10:50am TuTh 9:00am - 9:50am	Seats (Total: 25) BRB 1101 MTH 0306	Discussion
0122	Brian Smithling MWF 10:00am - 10:50am TuTh 9:00am - 9:50am	Seats (Total: 25) BRB 1101 MTH 0304	Discussion
0131	Brian Smithling MWF 10:00am - 10:50am TuTh 10:00am - 10:50am	Seats (Total: 27) BRB 1101 MTH 0306	Discussion
0132	Brian Smithling MWF 10:00am - 10:50am TuTh 10:00am - 10:50am	Seats (Total: 27) BRB 1101 MTH 0304	Discussion
0141	Brian Smithling MWF 10:00am - 10:50am TuTh 11:00am - 11:50am	Seats (Total: 25) BRB 1101 MTH 0306	Discussion

0142	Brian Smithling MWF 10:00am - 10:50am TuTh 11:00am - 11:50am	Seats (Total: 25) BRB 1101 MTH 0304	Discussion
0211	Patrick Brosnan MWF 11:00am - 11:50am TuTh 8:00am - 8:50am	Seats (Total: 25) ARM 0135 MTH B0423	Discussion
0212	Patrick Brosnan MWF 11:00am - 11:50am TuTh 8:00am - 8:50am	Seats (Total: 25) ARM 0135 MTH B0427	Discussion
0221	Patrick Brosnan MWF 11:00am - 11:50am TuTh 9:00am - 9:50am	Seats (Total: 25) ARM 0135 MTH B0423	Discussion
0222	Patrick Brosnan MWF 11:00am - 11:50am TuTh 9:00am - 9:50am	Seats (Total: 25) ARM 0135 MTH B0427	Discussion
0231	Patrick Brosnan MWF 11:00am - 11:50am TuTh 10:00am - 10:50am	Seats (Total: 25) ARM 0135 MTH B0423	Discussion
0241	Patrick Brosnan MWF 11:00am - 11:50am TuTh 11:00am - 11:50am	Seats (Total: 25) ARM 0135 MTH B0423	Discussion
0251	Patrick Brosnan MWF 11:00am - 11:50am TuTh 12:00pm - 12:50pm	Seats (Total: 25) ARM 0135 MTH B0423	Discussion
0261	Patrick Brosnan MWF 11:00am - 11:50am TuTh 1:00pm - 1:50pm	Seats (Total: 25) ARM 0135 MTH B0423	Discussion
0311	Jakob Hultgren MWF 1:00pm - 1:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 25) HJP 0226 MTH 0306	Discussion

0312	Jakob Hultgren MWF 1:00pm - 1:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 25) HJP 0226 MTH 0304	Discussion
0321	Jakob Hultgren MWF 1:00pm - 1:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 25) HJP 0226 MTH 0306	Discussion
0322	Jakob Hultgren MWF 1:00pm - 1:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 25) HJP 0226 MTH 0304	Discussion
0331	Jakob Hultgren MWF 1:00pm - 1:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 25) HJP 0226 MTH 0306	Discussion
0341	Jakob Hultgren MWF 1:00pm - 1:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 25) HJP 0226 MTH 0306	Discussion
0342	Jakob Hultgren MWF 1:00pm - 1:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 25) HJP 0226 MTH 0403	Discussion
0411	Roohollah Ebrahimian MWF 2:00pm - 2:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 25) PHY 1412 BPS 1228	Discussion
0412	Roohollah Ebrahimian MWF 2:00pm - 2:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 25) PHY 1412 CSI 3120	Discussion
0421	Roohollah Ebrahimian MWF 2:00pm - 2:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 25) PHY 1412 BPS 1228	Discussion
0422	Roohollah Ebrahimian MWF 2:00pm - 2:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 25) PHY 1412 CSI 3120	Discussion

0431	Roohollah Ebrahimian MWF 2:00pm - 2:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 25) PHY 1412 MTH 0101	Discussion
0432	Roohollah Ebrahimian MWF 2:00pm - 2:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 25) PHY 1412 MTH 0103	Discussion
0441	Roohollah Ebrahimian MWF 2:00pm - 2:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 25) PHY 1412 MTH 0201	Discussion
0442	Roohollah Ebrahimian MWF 2:00pm - 2:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 25) PHY 1412 MTH 0103	Discussion
FC01	Bo Tian MWTh 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 30) MTH 0405	
FC02	Martin Molina Fructuoso MWTh 3:00pm - 4:15pm <i>Restricted to students in Freshman Connection.</i>	Seats (Total: 30) MTH B0423	
FC03	Terence Long MWTh 4:30pm - 5:45pm	Seats (Total: 30) MTH 0403	

MATH141H Calculus II

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit CORE: MS

Prerequisite: Minimum grade of C- in MATH140. Or 1 course with a minimum grade of B- from (MATH130, MATH136); and permission of CMNS-Mathematics department. Credit only granted for: MATH121, MATH131, MATH141, or MATH221.

Continuation of MATH140, including techniques of integration, improper integrals, applications of integration (such as volumes, work, arc length, moments), inverse functions, exponential and logarithmic functions, sequences and series.

For general honors students only. TI graphics calculator required. Instructor will use a TI-83, TI-83+, TI 84, TI 84+, TI 86, or TI 89 calculator.

0101	Mestiyage Gunatilleka	Seats (Total: 20)
	WF 10:00am - 10:50am	MTH 0306
	M 10:00am - 11:50am	MTH 0306
0201	Yijing Wu	Seats (Total: 20)
	MF 2:00pm - 2:50pm	MTH 0306
	W 2:00pm - 3:50pm	MTH 0306

MATH206

Introduction to Matlab

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH136, MATH140). Credit only granted for: CMSC206, CMSC298M, MATH206, or MATH299M.

This course is intended to prepare students for subsequent courses requiring computation with MATLAB. Covers basics of MATLAB including simple commands, variables, solving equations, graphing differentiation and integration, matrices and vectors, functions, M-files and fundamentals of programming in the MATLAB environment. When offered in Winter and Summer terms, the course is offered in a format suitable for online distance learning.

0101	Justin Wyss-Gallifent	Seats (Total: 470)
	Meets August 26, 2019 - October 10, 2019	
	Class time/details on ELMs	ONLINE

MATH212

Elements of Numbers and Operations

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have completed one year of college preparatory algebra. Restriction: Must be in one of the following programs (Early Childhood Education; Special Education; Elementary Education). Credit only granted for: MATH212 or MATH210.

Reviews and extends topics of arithmetic and number theory related to the elementary school curriculum, particularly number systems and operations with natural numbers, integers, and rationals.

0101	Christopher Dock	Seats (Total: 20)
	MWF 10:00am - 10:50am	MTH 0102
0401	Kristyn Lue	Seats (Total: 20)
	MWF 2:00pm - 2:50pm	MTH 0102

MATH213 **Elements of Geometry and Measurement**

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: MATH212. Restriction: Must be in one of the following programs (Early Childhood Education; Special Education; Elementary Education). Credit only granted for: MATH211 or MATH213.

Properties of geometric objects in two and three dimensions; parallel lines, curves and polygons; ratio, proportion, similarity; transformational geometry and measurement, constructions, justifications and proofs.

0101	Sean Gruber	Seats (Total: 20)
	MWF 9:00am - 9:50am	MTH B0425
0201	Sean Gruber	Seats (Total: 25)
	MWF 10:00am - 10:50am	MTH B0425

MATH214 **Elements of Probability and Statistics**

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: MATH212. Restriction: Must be in one of the following programs (Early Childhood Education; Special Education; Elementary Education). Credit only granted for: MATH211 or MATH214.

Permutations and combinations; probability; collecting and representing data; using statistics to analyze and interpret data.

0201	Karen McLaren	Seats (Total: 28)
	MWF 9:00am - 9:50am	HBK 0105

MATH240 **Introduction to Linear Algebra**

Credits: 4 Grading Method: Regular,
 Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH131, MATH141). Credit only granted for: MATH240, MATH341, or MATH461.

Basic concepts of linear algebra: vector spaces, applications to line and plane geometry, linear equations and matrices, similar matrices, linear transformations, eigenvalues, determinants and quadratic forms.

0111	Mestiyage Gunatilleka MWF 12:00pm - 12:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 29) ARM 0135 MTH B0427	Discussion
0112	Mestiyage Gunatilleka MWF 12:00pm - 12:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 29) ARM 0135 MTH 0403	Discussion
0121	Mestiyage Gunatilleka MWF 12:00pm - 12:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 29) ARM 0135 MTH B0427	Discussion
0122	Mestiyage Gunatilleka MWF 12:00pm - 12:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 29) ARM 0135 MTH 0403	Discussion
0131	Mestiyage Gunatilleka MWF 12:00pm - 12:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 29) ARM 0135 MTH B0427	Discussion
0132	Mestiyage Gunatilleka MWF 12:00pm - 12:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 29) ARM 0135 MTH 0407	Discussion
0141	Mestiyage Gunatilleka MWF 12:00pm - 12:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 29) ARM 0135 MTH B0427	Discussion
0142	Mestiyage Gunatilleka MWF 12:00pm - 12:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 29) ARM 0135 MTH 0407	Discussion
0211	Allan Yashinski MWF 2:00pm - 2:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 30) ARM 0126 MTH B0429	Discussion
0212	Allan Yashinski MWF 2:00pm - 2:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 30) ARM 0126 MTH 0307	Discussion

0221	Allan Yashinski MWF 2:00pm - 2:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 30) ARM 0126 MTH B0429	Discussion
0222	Allan Yashinski MWF 2:00pm - 2:50pm TuTh 1:00pm - 1:50pm	Seats (Total: 30) ARM 0126 MTH 0307	Discussion
0231	Allan Yashinski MWF 2:00pm - 2:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 30) ARM 0126 MTH B0429	Discussion
0232	Allan Yashinski MWF 2:00pm - 2:50pm TuTh 2:00pm - 2:50pm	Seats (Total: 28) ARM 0126 ATL 1109	Discussion
0241	Allan Yashinski MWF 2:00pm - 2:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 30) ARM 0126 MTH B0429	Discussion
0242	Allan Yashinski MWF 2:00pm - 2:50pm TuTh 3:00pm - 3:50pm	Seats (Total: 28) ARM 0126 ATL 1109	Discussion
0311	Nathan Manning MWF 3:00pm - 3:50pm TuTh 11:00am - 11:50am	Seats (Total: 27) LEF 2205 MTH 0104	Discussion
0312	Nathan Manning MWF 3:00pm - 3:50pm TuTh 11:00am - 11:50am	Seats (Total: 28) LEF 2205 MTH 0307	Discussion
0321	Nathan Manning MWF 3:00pm - 3:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 27) LEF 2205 EGR 2116	Discussion
0322	Nathan Manning MWF 3:00pm - 3:50pm TuTh 12:00pm - 12:50pm	Seats (Total: 27) LEF 2205 MTH 1313	Discussion

0331	Nathan Manning	Seats (Total: 27)	
	MWF 3:00pm - 3:50pm	LEF 2205	
	TuTh 1:00pm - 1:50pm	EGR 2116	Discussion
0332	Nathan Manning	Seats (Total: 27)	
	MWF 3:00pm - 3:50pm	LEF 2205	
	TuTh 1:00pm - 1:50pm	MTH 1313	Discussion
0341	Nathan Manning	Seats (Total: 27)	
	MWF 3:00pm - 3:50pm	LEF 2205	
	TuTh 2:00pm - 2:50pm	MTH 0201	Discussion
0342	Nathan Manning	Seats (Total: 27)	
	MWF 3:00pm - 3:50pm	LEF 2205	
	TuTh 2:00pm - 2:50pm	MTH 0405	Discussion

MATH241

Calculus III

Credits: 4

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141. Credit only granted for: MATH241 or MATH340.

Introduction to multivariable calculus, including vectors and vector-valued functions, partial derivatives and applications of partial derivatives (such as tangent planes and Lagrange multipliers), multiple integrals, volume, surface area, and the classical theorems of Green, Stokes and Gauss.

All sections will use MATLAB.

0111	Matei Machedon	Seats (Total: 29)	
	MWF 9:00am - 9:50am	ARM 0126	
	TuTh 8:00am - 8:50am	MTH 0405	Discussion
0112	Matei Machedon	Seats (Total: 28)	
	MWF 9:00am - 9:50am	ARM 0126	
	TuTh 8:00am - 8:50am	MTH B0429	Discussion
0121	Matei Machedon	Seats (Total: 28)	
	MWF 9:00am - 9:50am	ARM 0126	
	TuTh 9:00am - 9:50am	MTH 0405	Discussion

0122	Matei Machedon MWF 9:00am - 9:50am TuTh 9:00am - 9:50am	Seats (Total: 28) ARM 0126 MTH B0429	Discussion
0131	Matei Machedon MWF 9:00am - 9:50am TuTh 10:00am - 10:50am	Seats (Total: 28) ARM 0126 MTH 0405	Discussion
0132	Matei Machedon MWF 9:00am - 9:50am TuTh 10:00am - 10:50am	Seats (Total: 28) ARM 0126 MTH B0429	Discussion
0141	Matei Machedon MWF 9:00am - 9:50am TuTh 11:00am - 11:50am	Seats (Total: 28) ARM 0126 MTH 0405	Discussion
0142	Matei Machedon MWF 9:00am - 9:50am TuTh 11:00am - 11:50am	Seats (Total: 28) ARM 0126 MTH B0429	Discussion
0211	Wiseley Wong MWF 10:00am - 10:50am TuTh 8:00am - 8:50am	Seats (Total: 27) PHY 1412 MTH 0307	Discussion
0212	Wiseley Wong MWF 10:00am - 10:50am TuTh 8:00am - 8:50am	Seats (Total: 28) PHY 1412 MTH 0303	Discussion
0221	Wiseley Wong MWF 10:00am - 10:50am TuTh 9:00am - 9:50am	Seats (Total: 27) PHY 1412 MTH 0307	Discussion
0222	Wiseley Wong MWF 10:00am - 10:50am TuTh 9:00am - 9:50am	Seats (Total: 27) PHY 1412 MTH 0303	Discussion
0231	Wiseley Wong MWF 10:00am - 10:50am TuTh 10:00am - 10:50am	Seats (Total: 27) PHY 1412 MTH 0307	Discussion

0232	Wiseley Wong MWF 10:00am - 10:50am TuTh 10:00am - 10:50am	Seats (Total: 28) PHY 1412 MTH 0303	Discussion
0241	Wiseley Wong MWF 10:00am - 10:50am TuTh 12:00pm - 12:50pm	Seats (Total: 28) PHY 1412 MTH 0405	Discussion
0242	Wiseley Wong MWF 10:00am - 10:50am TuTh 12:00pm - 12:50pm	Seats (Total: 27) PHY 1412 MTH B0425	Discussion
0311	Justin Wyss-Gallifent MWF 11:00am - 11:50am TuTh 10:00am - 10:50am	Seats (Total: 28) ARM 0126 ESJ 2212	Discussion
0312	Justin Wyss-Gallifent MWF 11:00am - 11:50am TuTh 10:00am - 10:50am	Seats (Total: 28) ARM 0126 ESJ 2212	Discussion
0321	Justin Wyss-Gallifent MWF 11:00am - 11:50am TuTh 11:00am - 11:50am	Seats (Total: 28) ARM 0126 ESJ 2212	Discussion
0322	Justin Wyss-Gallifent MWF 11:00am - 11:50am TuTh 11:00am - 11:50am	Seats (Total: 28) ARM 0126 ESJ 2212	Discussion
0331	Justin Wyss-Gallifent MWF 11:00am - 11:50am TuTh 12:00pm - 12:50pm	Seats (Total: 28) ARM 0126 ESJ 2212	Discussion
0332	Justin Wyss-Gallifent MWF 11:00am - 11:50am TuTh 12:00pm - 12:50pm	Seats (Total: 28) ARM 0126 ESJ 2212	Discussion
0341	Justin Wyss-Gallifent MWF 11:00am - 11:50am TuTh 1:00pm - 1:50pm	Seats (Total: 28) ARM 0126 ESJ 2212	Discussion

0342	Justin Wyss-Gallifent MWF 11:00am - 11:50am TuTh 1:00pm - 1:50pm	Seats (Total: 28) ARM 0126 ESJ 2212	Discussion
0411	David Hamilton MWF 1:00pm - 1:50pm TuTh 8:00am - 8:50am	Seats (Total: 27) ESJ 0224 MTH 0201	Discussion
0421	David Hamilton MWF 1:00pm - 1:50pm TuTh 9:00am - 9:50am	Seats (Total: 27) ESJ 0224 MTH 0201	Discussion
0431	David Hamilton MWF 1:00pm - 1:50pm TuTh 10:00am - 10:50am	Seats (Total: 27) ESJ 0224 MTH 0201	Discussion
0441	David Hamilton MWF 1:00pm - 1:50pm TuTh 11:00am - 11:50am	Seats (Total: 27) ESJ 0224 ESJ B0320	Discussion
0511	Terence Long MWF 3:00pm - 3:50pm TuTh 8:00am - 8:50am	Seats (Total: 26) HJP 0226 MTH 0407	Discussion
0512	Terence Long MWF 3:00pm - 3:50pm TuTh 8:00am - 8:50am	Seats (Total: 27) HJP 0226 MTH 0409	Discussion
0521	Terence Long MWF 3:00pm - 3:50pm TuTh 9:00am - 9:50am	Seats (Total: 26) HJP 0226 MTH 0407	Discussion
0522	Terence Long MWF 3:00pm - 3:50pm TuTh 9:00am - 9:50am	Seats (Total: 26) HJP 0226 MTH 0409	Discussion
0531	Terence Long MWF 3:00pm - 3:50pm TuTh 10:00am - 10:50am	Seats (Total: 26) HJP 0226 MTH 0407	Discussion

0532	Terence Long	Seats (Total: 26)
	MWF 3:00pm - 3:50pm	HJP 0226
	TuTh 10:00am - 10:50am	MTH B0427 Discussion
0541	Terence Long	Seats (Total: 26)
	MWF 3:00pm - 3:50pm	HJP 0226
	TuTh 11:00am - 11:50am	MTH 0403 Discussion
0542	Terence Long	Seats (Total: 26)
	MWF 3:00pm - 3:50pm	HJP 0226
	TuTh 11:00am - 11:50am	MTH B0427 Discussion

MATH241H Calculus III

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141. Credit only granted for: MATH241 or MATH340.

Introduction to multivariable calculus, including vectors and vector-valued functions, partial derivatives and applications of partial derivatives (such as tangent planes and Lagrange multipliers), multiple integrals, volume, surface area, and the classical theorems of Green, Stokes and Gauss.

For general honors students only. MATH241H will use MATLAB.

0101	Terence Long	Seats (Total: 25)
	MF 10:00am - 10:50am	MTH 0106
	W 10:00am - 11:50am	MTH 0106
0201	Guangyu Xi	Seats (Total: 25)
	MF 11:00am - 11:50am	MTH 0103
	W 11:00am - 12:50pm	MTH 0103
0301	Nathan Manning	Seats (Total: 22)
	MF 1:00pm - 1:50pm	LEF 1201
	W 1:00pm - 2:50pm	LEF 1201

MATH246 Differential Equations for Scientists and Engineers

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141. Credit only granted for: MATH246 or MATH341.

An introduction to the basic methods of solving ordinary differential equations. Equations of first and second order, linear differential equations, Laplace transforms, numerical methods and the qualitative theory of differential equations.

All sections will use MATLAB.

0111	Jonathan Rosenberg MWF 12:00pm - 12:50pm Tu 8:00am - 8:50am	Seats (Total: 28) ARM 0126 MTH 0401	Discussion
0121	Jonathan Rosenberg MWF 12:00pm - 12:50pm Tu 9:00am - 9:50am	Seats (Total: 28) ARM 0126 MTH 0401	Discussion
0131	Jonathan Rosenberg MWF 12:00pm - 12:50pm Tu 11:00am - 11:50am	Seats (Total: 28) ARM 0126 MTH 0401	Discussion
0141	Jonathan Rosenberg MWF 12:00pm - 12:50pm Tu 12:00pm - 12:50pm	Seats (Total: 28) ARM 0126 MTH 0401	Discussion
0211	Rodrigo Trevino TuTh 9:30am - 10:45am W 8:00am - 8:50am	Seats (Total: 23) ARM 0135 MTH 1308	Discussion
0212	Rodrigo Trevino TuTh 9:30am - 10:45am W 8:00am - 8:50am	Seats (Total: 23) ARM 0135 MTH 0302	Discussion
0221	Rodrigo Trevino TuTh 9:30am - 10:45am W 9:00am - 9:50am	Seats (Total: 23) ARM 0135 MTH 1308	Discussion
0222	Rodrigo Trevino TuTh 9:30am - 10:45am W 9:00am - 9:50am	Seats (Total: 23) ARM 0135 MTH 0302	Discussion
0231	Rodrigo Trevino TuTh 9:30am - 10:45am W 10:00am - 10:50am	Seats (Total: 23) ARM 0135 MTH 1308	Discussion

0232	Rodrigo Trevino TuTh 9:30am - 10:45am W 10:00am - 10:50am	Seats (Total: 23) ARM 0135 MTH 0302	Discussion
0241	Rodrigo Trevino TuTh 9:30am - 10:45am W 11:00am - 11:50am	Seats (Total: 23) ARM 0135 MTH 1308	Discussion
0242	Rodrigo Trevino TuTh 9:30am - 10:45am W 11:00am - 11:50am	Seats (Total: 23) ARM 0135 MTH 0302	Discussion
0311	Michael Jakobson TuTh 12:30pm - 1:45pm F 8:00am - 8:50am	Seats (Total: 23) ARM 0131 MTH 0401	Discussion
0321	Michael Jakobson TuTh 12:30pm - 1:45pm F 9:00am - 9:50am	Seats (Total: 23) ARM 0131 MTH 0401	Discussion
0331	Michael Jakobson TuTh 12:30pm - 1:45pm F 10:00am - 10:50am	Seats (Total: 23) ARM 0131 MTH 0401	Discussion
0341	Michael Jakobson TuTh 12:30pm - 1:45pm F 11:00am - 11:50am	Seats (Total: 23) ARM 0131 MTH 0401	Discussion
0411	Charles Levermore TuTh 2:00pm - 3:15pm M 9:00am - 9:50am	Seats (Total: 23) ESJ 0224 ESJ 0215	Discussion
0421	Charles Levermore TuTh 2:00pm - 3:15pm M 9:00am - 9:50am	Seats (Total: 23) ESJ 0224 ESJ 0215	Discussion
0422	Charles Levermore TuTh 2:00pm - 3:15pm M 9:00am - 9:50am	Seats (Total: 23) ESJ 0224 ESJ 0215	Discussion

0431	Charles Levermore TuTh 2:00pm - 3:15pm M 11:00am - 11:50am	Seats (Total: 23) ESJ 0224 ESJ 0215	Discussion
0432	Charles Levermore TuTh 2:00pm - 3:15pm M 11:00am - 11:50am	Seats (Total: 23) ESJ 0224 ESJ 0215	Discussion
0433	Charles Levermore TuTh 2:00pm - 3:15pm M 11:00am - 11:50am	Seats (Total: 23) ESJ 0224 ESJ 0215	Discussion
0441	Charles Levermore TuTh 2:00pm - 3:15pm M 12:00pm - 12:50pm	Seats (Total: 23) ESJ 0224 ESJ 0215	Discussion
0442	Charles Levermore TuTh 2:00pm - 3:15pm M 12:00pm - 12:50pm	Seats (Total: 23) ESJ 0224 ESJ 0215	Discussion
0443	Charles Levermore TuTh 2:00pm - 3:15pm M 12:00pm - 12:50pm	Seats (Total: 23) ESJ 0224 ESJ 0215	Discussion
0601	Alice Wang TuTh 9:30am - 10:45am	Seats (Total: 29) CSI 2120	

MATH246H Differential Equations for Scientists and Engineers

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141. Credit only granted for: MATH246 or MATH341.

An introduction to the basic methods of solving ordinary differential equations. Equations of first and second order, linear differential equations, Laplace transforms, numerical methods and the qualitative theory of differential equations.

For general honors students only. MATH241H will use MATLAB.

0101	Jonathan Fernandes TuTh 12:30pm - 1:45pm	Seats (Total: 25) MTH B0421
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MATH274**History of Mathematics**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: IE

Prerequisite: MATH120, MATH130, MATH136, or MATH140; or must have completed MATH220.

An overview of aspects in the history of mathematics from its beginning in the concrete problem solving of ancient times through the development of abstraction in the 19th and 20th centuries. The course considers both mathematical ideas and the context in which they developed in various civilizations around the world.

0101	Raluca Rosca	Seats (Total: 20)
	MWF 11:00am - 11:50am	CHM 1224

MATH299A**Selected Topics in Mathematics; Special Topics in Study Abroad II: Introduction to Mathematical Computing**

Credits: 3 Grading Method: Regular

Topics of special interest under the general guidance of the departmental committee on undergraduate studies.

Contact department for information to register for this course.

MATH299B**Selected Topics in Mathematics; Putnam Express**

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest under the general guidance of the departmental committee on undergraduate studies.

0101	Roohollah Ebrahimian	Seats (Total: 25)
	W 4:00pm - 5:30pm	MTH 0102

MATH299C**Selected Topics in Mathematics; Mathematics & Classical Music**

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest under the general guidance of the departmental committee on undergraduate studies.

0101	Niranjan Ramachandran	Seats (Total: 20)
	W 2:00pm - 2:50pm	MTH 0101

MATH299E**Selected Topics in Mathematics; The Mathematics of Erdos**

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest under the general guidance of the departmental committee on undergraduate studies.

Combinatorics is the study of counting. Despite its deceptively simple name, it is one of the most active areas of research in modern mathematics. We discuss some of the basic ideas behind combinatorics, and their unexpected applications. The proofs we discuss are so elegant that Paul Erdos once said they are from The Book God's book of the most elegant proof of each theorem. This is a Student Taught Initiated Course and will be led by students, not faculty.

0101	Lawrence Washington	Seats (Total: 20)
	F 1:00pm - 2:00pm	MTH 0411

MATH299M Selected Topics in Mathematics; Visualization through Mathematica

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest under the general guidance of the departmental committee on undergraduate studies.

Prerequisites: MATH140 and MATH141 (or equivalent).

0101	Jason Filippou	Seats (Total: 30)
	F 2:00pm - 2:50pm	EGR 0135

MATH299T Selected Topics in Mathematics; Poker Theory and Analysis

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest under the general guidance of the departmental committee on undergraduate studies.

0101	Wiseley Wong	Seats (Total: 30)
	M 4:00pm - 4:50pm	ESJ 2309

MATH310 Introduction to Mathematical Proof

Credits: 3 Grading Method: Regular

Prerequisite: Minimum grade of C- in MATH141; and must have completed or be concurrently enrolled in MATH240, MATH341, or MATH461; and must have completed or be concurrently enrolled in MATH241 or MATH340. Restriction: Must be in a major within the CMNS-Mathematics department. Credit only granted for: MATH307 or MATH310. Additional information: Math majors may not use this course to satisfy an upper-level requirement.

To develop the students' ability to construct a rigorous proof of a mathematical claim. Students will also be made aware of mathematical results that are of interest to those wishing to analyze a particular mathematical model. Topics will be drawn from logic, set theory, structure of the number line, elementary topology, metric spaces, functions, sequences and continuity.

0101	Steve Halperin MWF 9:00am - 9:50am	Seats (Total: 28) ITV 1100
0201	Kathryn Truman MWF 10:00am - 10:50am	Seats (Total: 28) MTH 0303
0301	Nathan Manning MWF 11:00am - 11:50am	Seats (Total: 28) ITV 1100
0401	Kendall Williams MWF 1:00pm - 1:50pm	Seats (Total: 28) MTH 0106

MATH314 Introduction to Probability, Data, Analysis and Statistics for Preservice Middle School Teachers

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH214. Restriction: Must be in one of the following programs (Elementary Education; Special Education; Middle School Education). Credit only granted for: MATH314 or STAT100.

Analysis of bivariate data, probability and randomness, law of large numbers, central limit theorem, probabilities for independent and dependent events, counting techniques, random variables and probability distributions, expected values, sampling distributions, and confidence intervals.

0101	William Viviani MW 2:00pm - 3:15pm	Seats (Total: 28) MTH 0402
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MATH315 Algebra for Preservice Middle School Teachers

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH212. Restriction: Must be in one of the following programs (Elementary Education; Special Education; Middle School Education). Credit only granted for: MATH112, MATH113, or MATH315.

Algebraic concepts and techniques developed in the middle grades, with their larger mathematical context. Equations, inequalities and functions (linear, polynomial, exponential, logarithmic), with multiple representations of relationships. Common misconceptions of beginning algebra students.

0101	Carolina Napp-Avelli	Seats (Total: 28)
	Tu 2:00pm - 3:15pm	EDU 2212B
	Th 2:00pm - 3:15pm	MTH 0402

MATH340 Multivariable Calculus, Linear Algebra and Differential Equations I (Honors)

(Perm req)

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH141 and MATH140; and permission of CMNS-Mathematics department; and permission will be granted only to incoming freshmen. Credit only granted for: MATH241 or MATH340.

First semester of the MATH340-341 sequence which gives a unified and enriched treatment of multivariable calculus, linear algebra and ordinary differential equations, with supplementary material from subjects such as differential geometry, Fourier series and calculus of variations. Students completing MATH340-341 will have covered the material of MATH240, MATH241, and MATH246, and may not also receive credit for MATH240, MATH241 or MATH246.

0101	Niranjan Ramachandran	Seats (Total: 25)
	MWF 9:00am - 10:15am	MTH B0423
0201	Wiseley Wong	Seats (Total: 25)
	MWF 2:00pm - 3:15pm	MTH B0421

MATH386 Experiential Learning

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Prerequisite: Must have learning proposal approved by the CMNS Mathematics Department.

Contact department for information to register for this course.

MATH401 Applications of Linear Algebra

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH461, MATH240, MATH341).

Various applications of linear algebra: theory of finite games, linear programming, matrix methods as applied to finite Markov chains, random walk, incidence matrices, graphs and directed graphs, networks and transportation problems.

0101	Allan Yashinski MWF 10:00am - 10:50am	Seats (Total: 31) MTH 0201
0201	Yordanka Kovacheva MWF 11:00am - 11:50am	Seats (Total: 31) CHM 0128
0301	Raluca Rosca MWF 1:00pm - 1:50pm	Seats (Total: 31) ITV 1100
0401	Jonathan Fernandes MWF 2:00pm - 2:50pm	Seats (Total: 31) MTH 0307
0501	Fei Wang TuTh 9:30am - 10:45am	Seats (Total: 31) ITV 1100
0601	Weikun Wang TuTh 11:00am - 12:15pm	Seats (Total: 31) MTH B0421

MATH402 Algebraic Structures

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461).

Restriction: Must not be in any of the following programs (Mathematics (Master's); Mathematics (Doctoral)). Credit only granted for: MATH402 or MATH403.

For students having only limited experience with rigorous mathematical proofs. Parallels MATH403. Students planning graduate work in mathematics should take MATH403. Groups, rings, integral domains and fields, detailed study of several groups; properties of integers and polynomials. Emphasis is on the origin of the mathematical ideas studied and the logical structure of the subject.

0101	Steven Chadwick MWF 2:00pm - 2:50pm	Seats (Total: 28) MTH 0405
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MATH403 Introduction to Abstract Algebra

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH340); and 1 course with a minimum grade of C- from (MATH341, MATH241); and minimum grade of C- in MATH310. Or students who have taken courses with comparable content may contact the department. Credit only granted for: MATH402 or MATH403.

Integers; groups, rings, integral domains, fields.

0101	Niranjan Ramachandran	Seats (Total: 32)
	MWF 11:00am - 11:50am	MTH 0201
0201	Roohollah Ebrahimian	Seats (Total: 32)
	MWF 10:00am - 10:50am	MTH B0421

MATH405

Linear Algebra

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and minimum grade of C- in MATH310.

An abstract treatment of finite dimensional vector spaces. Linear transformations and their invariants.

0101	Patrick Brosnan	Seats (Total: 32)
	MWF 12:00pm - 12:50pm	MTH 0101
0201	Matei Machedon	Seats (Total: 32)
	MWF 12:00pm - 12:50pm	MTH 0306

MATH406

Introduction to Number Theory

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH241, MATH246, MATH340, MATH341, MATH461); or permission of CMNS-Mathematics department.

Integers, divisibility, prime numbers, unique factorization, congruences, quadratic reciprocity, Diophantine equations and arithmetic functions.

0101	Jeffrey Adams	Seats (Total: 32)
	MWF 10:00am - 10:50am	ITV 1100
0201	Allan Yashinski	Seats (Total: 32)
	MWF 11:00am - 11:50am	CHM 1228

0301	Manjit Bhatia	Seats (Total: 32)
	TuTh 11:00am - 12:15pm	MTH 0201

MATH410

(Perm req)

Advanced Calculus I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and 1 course with a minimum grade of C- from (MATH340, MATH241); and minimum grade of C- in MATH310. Or students who have taken courses with comparable content may contact the department.

First semester of a year course. Subjects covered during the year are: sequences and series of numbers, continuity and differentiability of real valued functions of one variable, the Riemann integral, sequences of functions and power series. Functions of several variables including partial derivatives, multiple integrals, line and surface integrals. The implicit function theorem.

0101	Denny Gulick	Seats (Total: 30)
	MWF 10:00am - 10:50am	MTH 0103
0201	Charles Levermore	Seats (Total: 30)
	MWF 11:00am - 11:50am	MTH 0101
0301	Leonid Koralov	Seats (Total: 30)
	MWF 1:00pm - 1:50pm	MTH 0105
0401	David Hamilton	Seats (Total: 30)
	MWF 3:00pm - 3:50pm	MTH 0302
0501	Changguang Dong	Seats (Total: 30)
	TuTh 9:30am - 10:45am	MTH B0421
0601	Jacob Bedrossian	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	CHM 1228
0701	Stefan Doboszczak	Seats (Total: 25)
	MWF 10:00am - 10:50am	MTH B0429

MATH411

(Perm req)

Advanced Calculus II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

*Prerequisite: Minimum grade of C- in MATH410; and permission of CMNS-Mathematics department.
Credit only granted for: MATH411 or MATH412.*

Continuation of MATH410.

0101	Kendall Williams	Seats (Total: 28)
	MWF 11:00am - 11:50am	MTH B0421
0201	Giovanni Forni	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	MTH 0102

MATH416 Applied Harmonic Analysis: An Introduction to Signal Processing

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141; and 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and familiarity with MATLAB is required.

Introduces students to the mathematical concepts arising in signal analysis from the applied harmonic analysis point of view. Topics include applied linear algebra, Fourier series, discrete Fourier transform, Fourier transform, Shannon Sampling Theorem, wavelet bases, multiresolution analysis, and discrete wavelet transform.

0101	Wojciech Czaja	Seats (Total: 25)
	MWF 11:00am - 11:50am	MTH 1311

MATH424 Introduction to the Mathematics of Finance

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141; and 1 course with a minimum grade of C- from (STAT400, STAT410); and permission of CMNS-Mathematics department. Recommended: MATH246, MATH240, MATH241, MATH340, or MATH341. Credit only granted for: BMGT444, MATH424.

Introduction to the mathematical models used in finance and economics with emphasis on pricing derivative instruments. Designed for students in mathematics, computer science, engineering, finance and physics. Financial markets and instruments; elements from basic probability theory; interest rates and present value analysis; normal distribution of stock returns; option pricing; arbitrage pricing theory; the multiperiod binomial model; the Black-Scholes option pricing formula; proof of the Black-Scholes option pricing formula and applications; trading and hedging of options; Delta hedging; utility functions and portfolio theory; elementary stochastic calculus; Ito's Lemma; the Black-Scholes equation and its conversion to the heat equation.

0101	Konstantina Trivisa	Seats (Total: 33)
	TuTh 2:00pm - 3:15pm	ITV 1100

MATH430 Euclidean and Non-Euclidean Geometries

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461).

Hilbert's axioms for Euclidean geometry. Neutral geometry: the consistency of the hyperbolic parallel postulate and the inconsistency of the elliptic parallel postulate with neutral geometry. Models of hyperbolic geometry. Existence and properties of isometries.

0101	Karin Melnick	Seats (Total: 25)
	MWF 11:00am - 11:50am	CHM 0122

MATH431 Geometry for Computer Applications

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH461, MATH240, MATH341).

Topics from projective geometry and transformation geometry, emphasizing the two-dimensional representation of three-dimensional objects and objects moving about in the plane and space. The emphasis will be on formulas and algorithms of immediate use in computer graphics.

0101	Justin Wyss-Gallifent	Seats (Total: 31)
	MWF 9:00am - 9:50am	AJC 2134

MATH432 Introduction to Topology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH410.

Metric spaces, topological spaces, connectedness, compactness (including Heine-Borel and Bolzano-Weierstrass theorems), Cantor sets, continuous maps and homeomorphisms, fundamental group (homotopy, covering spaces, the fundamental theorem of algebra, Brouwer fixed point theorem), surfaces (e.g., Euler characteristic, the index of a vector field, hairy sphere theorem), elements of combinatorial topology (graphs and trees, planarity, coloring problems).

0101	Harry Tamvakis	Seats (Total: 28)
	TuTh 2:00pm - 3:15pm	MTH 0106

MATH436 Differential Geometry of Curves and Surfaces I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH241, MATH340); and 1 course with a minimum grade of C- from (MATH461, MATH240, MATH341); and must have completed two 400-level MATH courses with a minimum grade of C- (not including MATH461, 478, and 480's).

Curves in the plane and Euclidean space, moving frames, surfaces in Euclidean space, orientability of surfaces; Gaussian and mean curvatures; surfaces of revolution, ruled surfaces, minimal surfaces, special curves on surfaces, "Theorema Egregium"; the intrinsic geometry of surfaces.

0101	Terence Long	Seats (Total: 20)
	MWF 1:00pm - 1:50pm	MTH 1308

MATH445 Elementary Mathematical Logic

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141.

Elementary development of propositional and predicate logic, including semantics and deductive systems and with a discussion of completeness, incompleteness and the decision problem.

0101	Samuel Braunfeld	Seats (Total: 20)
	MWF 12:00pm - 12:50pm	MTH 0407

MATH452 Introduction to Dynamics and Chaos

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH341. Or MATH246; and (MATH240 or MATH461). Also offered as: AMSC452. Credit only granted for: AMSC452 or MATH452.

An introduction to mathematical dynamics and chaos. Orbits, bifurcations, Cantor sets and horseshoes, symbolic dynamics, fractal dimension, notions of stability, flows and chaos. Includes motivation and historical perspectives, as well as examples of fundamental maps studied in dynamics and applications of dynamics.

0101	Dmitry Dolgopyat	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	MTH 0101

MATH456**Cryptography**

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: (CMSC106, CMSC131, or ENEE150; or equivalent programming experience); and (2 courses from (CMSC330, CMSC351, ENEE324, or ENEE380); or any one of these courses and a 400-level MATH course, or two 400-level MATH courses). Or permission of instructor. Also offered as: CMSC456, ENEE456. Credit only granted for: MATH456, CMSC456 or ENEE456.

The theory, application, and implementation of mathematical techniques used to secure modern communications. Topics include symmetric and public-key encryption, message integrity, hash functions, block-cipher design and analysis, number theory, and digital signatures.

0101	Lawrence Washington	Seats (Total: 78)
	TuTh 2:00pm - 3:15pm	CSI 3117
0201	William Gasarch	Seats (Total: 95)
	MW 2:00pm - 3:15pm	IRB 0318

MATH461**Linear Algebra for Scientists and Engineers**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum grade of C- in MATH141; and must have completed any MATH or STAT course with a prerequisite of MATH141. Credit only granted for: MATH240, MATH341, or MATH461.

Additional information: This course may not be used towards the upper level math requirements for MATH/STAT majors.

Basic concepts of linear algebra. This course is similar to MATH 240, but with more extensive coverage of the topics needed in applied linear algebra: change of basis, complex eigenvalues, diagonalization, the Jordan canonical form.

0111	Antoine Mellet	Seats (Total: 27)
	TuTh 2:00pm - 3:15pm	ARM 0126
	M 9:00am - 9:50am	MTH B0429 Discussion
0112	Antoine Mellet	Seats (Total: 27)
	TuTh 2:00pm - 3:15pm	ARM 0126
	M 9:00am - 9:50am	MTH 0103 Discussion
0113	Antoine Mellet	Seats (Total: 27)
	TuTh 2:00pm - 3:15pm	ARM 0126
	M 9:00am - 9:50am	MTH 0201 Discussion

0121	Antoine Mellet TuTh 2:00pm - 3:15pm M 11:00am - 11:50am	Seats (Total: 27) ARM 0126 MTH 0105	Discussion
0122	Antoine Mellet TuTh 2:00pm - 3:15pm M 11:00am - 11:50am	Seats (Total: 28) ARM 0126 MTH 0401	Discussion
0131	Antoine Mellet TuTh 2:00pm - 3:15pm M 12:00pm - 12:50pm	Seats (Total: 27) ARM 0126 MTH 0105	Discussion
0132	Antoine Mellet TuTh 2:00pm - 3:15pm M 12:00pm - 12:50pm	Seats (Total: 27) ARM 0126 MTH 0401	Discussion
0141	Antoine Mellet TuTh 2:00pm - 3:15pm M 2:00pm - 2:50pm	Seats (Total: 27) ARM 0126 MTH B0429	Discussion
0142	Antoine Mellet TuTh 2:00pm - 3:15pm M 2:00pm - 2:50pm	Seats (Total: 27) ARM 0126 MTH 0106	Discussion
0211	Fei Wang TuTh 11:00am - 12:15pm	Seats (Total: 30) ITV 1100	

MATH462

Partial Differential Equations

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH241, MATH340); and 1 course with a minimum grade of C- from (MATH246, MATH341).

Linear spaces and operators, orthogonality, Sturm-Liouville problems and eigenfunction expansions for ordinary differential equations. Introduction to partial differential equations, including the heat equation, wave equation and Laplace's equation. Boundary value problems, initial value problems and initial-boundary value problems.

0201	Ricardo Nochetto TuTh 2:00pm - 3:15pm	Seats (Total: 20) MTH 0411	
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MATH463**Complex Variables**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH241, MATH340).

The algebra of complex numbers, analytic functions, mapping properties of the elementary functions. Cauchy integral formula. Theory of residues and application to evaluation of integrals. Conformal mapping.

0101	Manoussos Grillakis	Seats (Total: 32)
	MWF 10:00am - 10:50am	PHY 1204

MATH464**Transform Methods for Scientists and Engineers**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH246, MATH341).

Fourier transform, Fourier series, discrete fast Fourier transform (DFT and FFT). Laplace transform. Poisson summations, and sampling. Optional Topics: Distributions and operational calculus, PDEs, Wavelet transform, Radon transform and applications such as Imaging, Speech Processing, PDEs of Mathematical Physics, Communications, Inverse Problems.

0101	Radu Balan	Seats (Total: 28)
	TuTh 3:30pm - 4:45pm	MTH 0402

MATH475**Combinatorics and Graph Theory**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH341, MATH461); and 1 course with a minimum grade of C- from (MATH241, MATH340); and permission of CMNS-Mathematics department. Cross-listed with CMSC475. Credit only granted for: MATH475 or CMSC475.

General enumeration methods, difference equations, generating functions. Elements of graph theory, matrix representations of graphs, applications of graph theory to transport networks, matching theory and graphical algorithms.

0101	Wiseley Wong	Seats (Total: 30)
	MWF 11:00am - 11:50am	MTH 0303

MATH478A**Selected Topics For Teachers of Mathematics**

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

MATH480

Algebra for Middle School Teachers

Credits: 3

Grading Method: Regular

Prerequisite: MATH214. Restriction: Must be a middle school teacher; and permission of CMNS-Mathematics department. Credit only granted for: MATH480 or MATH483. Additional information: Not applicable to MATH/STAT major or minor requirements.

Prepares teachers with elementary certification to teach Algebra 1 in middle school. Focuses on basic algebra concepts and related theoretical ideas.

Contact department for information to register for this course.

MATH489

Research Interactions in Mathematics; Research Interactions in Mathematics

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Students participate in a vertically integrated (undergraduate, graduate and/or postdoctoral, faculty) mathematics research group. Format varies. Students and supervising faculty will agree to a contract which must be approved by the department. Up to three credits of MATH489 may be applied to the mathematics degree requirements. See the department's MATH489 online syllabus for further information.

Contact department for information to register for this course.

MATH498A

Selected Topics in Mathematics

(Perm req)

Credits: 1-9

Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest to advanced undergraduate students will be offered occasionally under the general guidance of the departmental committee on undergraduate studies.

Contact department for information to register for this course.

MATH600

Abstract Algebra I

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: MATH405 and MATH403; or students who have taken courses with comparable content may contact the department.

Groups with operators, homomorphism and isomorphism theorems, normal series, Sylow theorems, free groups, Abelian groups, rings, integral domains, fields, modules. Topics may include HOM (A,B), Tensor products, exterior algebra.

Offered fall only.

0101	James Schafer	Seats (Total: 20)
	TuTh 9:30am - 10:45am	MTH 0106

MATH606 Algebraic Geometry I

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: MATH600 and MATH601.

Prime and primary ideals in Noetherian rings, Hilbert Nullstellensatz, places and valuations, prevarieties (in the sense of Serre), dimension, morphisms, singularities, varieties, schemes, rationality.

0101	Amin Gholampour	Seats (Total: 21)
	MWF 10:00am - 10:50am	CHM 0128

MATH630 Real Analysis I

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: MATH411; or students who have taken courses with comparable content may contact the department.

Lebesgue measure and the Lebesgue integral on $\mathbb{R}$, differentiation of functions of bounded variation, absolute continuity and fundamental theorem of calculus, L_p spaces on $\mathbb{R}$, Riesz-Fischer theorem, bounded linear functionals on L_p , measure and outer measure, Fubini's theorem.

0101	Wojciech Czaja	Seats (Total: 20)
	MWF 9:00am - 9:50am	MTH B0421

MATH634 Harmonic Analysis

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: MATH630.

L^1 theory: Fejer theorem, inversion theorem, ideal structure, Tauberian theorem. L^2 theory: Plancherel-Parseval theorems, Paley-Wiener theorem. L_p theory: Hausdorff-Young theorem. Distribution theory: Bochner's theorem, Wiener continuous measures theorem, Malliavin theorem, Schwartz theory, almost periodic functions.

0101	John Benedetto	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	MTH 1311

MATH642 Dynamical Systems I

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: MATH432. And MATH630; or students who have taken courses with comparable content may contact the department.

Foundations of topological dynamics, homeomorphisms, flows, periodic and recurrent points, transitivity and minimality, symbolic dynamics. Elements of ergodic theory, invariant measures and sets, ergodicity, ergodic theorems, mixing, spectral theory, flows and sections. Applications of dynamical systems to number theory, the Weyl theorem, the distribution of values of polynomials, Vander Waerden's theorem on arithmetic progressions.

0101	Rodrigo Trevino	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	PHY 1219

MATH673 Partial Differential Equations I

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: MATH411; or students who have taken courses with comparable content may contact the department. Cross-listed with AMSC67 3. Credit only granted for: AMSC673 or MATH673.

Analysis of boundary value problems for Laplace's equation, initial value problems for the heat and wave equations. Fundamental solutions, maximum principles, energy methods. First order nonlinear PDE, conservation laws. Characteristics, shock formation, weak solutions. Distributions, Fourier transform.

Offered fall only.

0101	Manoussos Grillakis	Seats (Total: 30)
	MWF 12:00pm - 12:50pm	MTH 0303

MATH689 Research Interactions in Mathematics

(Perm req) Credits: 1-3 Grading Method: Regular,
Audit

The students participate in a vertically integrated (undergraduate, graduate and/or postdoctoral, faculty) research group. Format varies, but includes regular meetings, readings and presentations of material. See graduate program's online syllabus or contact the graduate program director for more information.

Contact department for information to register for this course.

MATH695 Teaching Seminar

Credits: 1 Grading Method: Regular

Restriction: Must be in one of the following programs (Mathematics (Doctoral); Mathematics (Master's); Mathematical Statistics (Doctoral); Applied Mathematics and Scientific Computation (Master's); Mathematical Statistics (Master's); Applied Mathematics and Scientific Computation (Doctoral)).

A course intended for first year teaching assistants. Topics include: everyday mechanics of teaching; teaching methods and styles; technology; course enrichment, diversity in the classroom; sexual harassment; teacher-student interactions; presentations by students.

0101	Justin Wyss-Gallifent	Seats (Total: 20)
	W 4:00pm - 5:30pm	MTH B0421

MATH712 Mathematical Logic I

Credits: 3 Grading Method: Regular,
Audit

Sentential logic, first-order languages, models and formal deductions. Basic model theory including completeness and compactness theorems, other methods of constructing models, and applications such as non-standard analysis.

0101	Michael Laskowski	Seats (Total: 15)
	TuTh 12:30pm - 1:45pm	PHY 4222

MATH730 Fundamental Concepts of Topology

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: MATH403, MATH410, and MATH411; or students who have taken courses with comparable content may contact the department.

Survey of basic point set topology, fundamental group, covering spaces, Van Kampen's theorem, simplicial complexes, simplicial homology, Euler characteristics and classification of surfaces.

0101	Christian Zickert	Seats (Total: 18)
	TuTh 2:00pm - 3:15pm	MTH B0431

MATH742 Geometric Analysis

Credits: 3 Grading Method: Regular,
Audit

Calculus of Variations, Bochner technique, Morse theory, weak solutions and elliptic regularity, maximum principle for elliptic and parabolic equations, Green's function of the Laplacian, isoperimetric and Sobolev inequalities, continuity method, curvature and comparison results, harmonic maps, curvature prescription problems.

0101	Karin Melnick	Seats (Total: 15)
	MWF 1:00pm - 1:50pm	MTH 0103

MATH744 Lie Groups I

Credits: 3 Grading Method: Regular, Audit

Prerequisite: MATH405, MATH403, MATH411, and MATH432; or students who have taken courses with comparable content may contact the department.

An introduction to the fundamentals of Lie groups, including some material on groups of matrices and Lie algebras.

0101	Jeffrey Adams	Seats (Total: 20)
	MWF 11:00am - 11:50am	MTH 0102

MATH799 **Master's Thesis Research**

Credits: 1-6 Grading Method: Regular, Satisfail

Contact department for information to register for this course.

MATH808A Selected Topics in Algebra

Credits: 1-3 Grading Method: Regular

Advanced topics of current interest.

Contact department for information to register for this course.

MATH808J Selected Topics in Algebra; Vector Bundles on Algebraic Curves

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

0101	Michael Rapoport	Seats (Total: 20)
	MWF 1:00pm - 1:50pm	MTH 0303

MATH818A

Credits: 1-3

Advanced topics of current interest.

Contact department for information to register for this course.

MATH848A

Credits: 1-3

Advanced topics of current interest.

Contact department for information to register for this course.

MATH848G

Credits: 1-3

Advanced topics of current interest.

0101	Jonathan Rosenberg	Seats (Total: 20)
	MWF 9:00am - 9:50am	MTH 0307

MATH858A

Credits: 1-3

Advanced topics of current interest.

Contact department for information to register for this course.

MATH858P

Credits: 1-3

Advanced topics of current interest.

0101	Radu Balan	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	CSI 4122

MATH868A

Credits: 1-3 Grading Method: Regular,
Audit

Advanced topics of current interest.

Contact department for information to register for this course.

MATH898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

MATH899 Doctoral Dissertation Research

(Perm req) Credits: 6 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

MEES Marine-Estuarine-Environmental Sciences Fall 2019

MEES498I Topics in Marine-Estuarine-Environmental Sciences; Chesapeake Bay Health

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Lecture and/or laboratory series organized to study a selected area of marine-estuarine-environmental sciences not otherwise considered in formal courses.

Jointly offered with MEES698I. Credit only granted for MEES498I or MEES698I. Taught at Chesapeake Biological Laboratories (CBL) and over the Interactive Video Network (IVN).

0101	Carys Mitchelmore	Seats (Total: 20)
	Meets August 26, 2019 - December 17, 2019	
	TuTh 12:30pm - 1:50pm	HJP 1213B

MEES607 Quantitative Methods in Environmental Sciences

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: MATH120 and MATH121; or must have completed MATH220 and MATH221; or students who have taken courses with comparable content may contact the department. Credit only granted for: MEES607 or MEES698G. Formerly: MEES698G.

Mathematical approaches and solutions (both analytical and numerical) that cut across environmental disciplines, and will introduce analytical techniques.

Taught at the Chesapeake Biological Laboratory and on the Interactive Video Network.

0101	Hongsheng Bi, Lawrence Sanford	Seats (Total: 20)	
	TuTh 9:30am - 10:50am	HJP 1213B	
	F 11:00am - 11:50am	HJP 1213B	Discussion

MEES608B Seminar in Marine-Estuarine-Environmental Sciences; Responsible Conduct of Research

Credits: 1 Grading Method: Regular,
Audit

Taught over the Interactive Video Network (IVN)

0101	Russell Hill, Thomas Miller	Seats (Total: 20)	
	Tu 2:00pm - 2:50pm	HJP 1213B	

MEES608D Seminar in Marine-Estuarine-Environmental Sciences; Scientific Writing and Communication

Credits: 2 Grading Method: Regular,
Audit

Taught at the Horn Point Laboratory and on the Interactive Video Network.

0101	Elizabeth North	Seats (Total: 24)	
	F 9:00am - 10:50am	HJP 1213B	

MEES608M Seminar in Marine-Estuarine-Environmental Sciences; Species Distribution Modeling in R

Credits: 1 Grading Method: Regular,
Audit

Taught over the Interactive Video Network (IVN).

0101	Matthew Fitzpatrick	Seats (Total: 20)	
	W 2:00pm - 2:50pm	HJP 1213C	

MEES608O Seminar in Marine-Estuarine-Environmental Sciences; Topics in OMICS

Credits: 1 Grading Method: Regular,
Audit

Taught over the Interactive Video Network (IVN).

0101	Jum Sook Chung	Seats (Total: 20)
	Meets August 26, 2019 - December 17, 2019	
	F 12:00pm - 12:50pm	HJP 1213B

MEES609B Professional Development in Marine Estuarine Environmental Science; Scientific Job Skills 101

Credits: 1 Grading Method: Regular,
 Pass-Fail, Audit

Training designed for existing and future careers.

Taught over the Interactive Video Network (IVN)

0101	David Nelson, Hali Kilbourne	Seats (Total: 20)
	M 2:00pm - 2:50pm	HJP 1213B

MEES620 Environment and Society

Credits: 3 Grading Method: Regular,
 Audit

Additional information: Offered over the interactive video network.

Students will obtain foundational knowledge of core theories and methods that integrate cultural and socio-economic research into environmental science. Key topics include: coupled natural and human systems, cultural models of the environment, social networks, ecological economics, political ecology, environmental justice, and science communication.

Taught at UMCP and over the Interactive Video Network (IVN) Also taught as ANTH620

0101	William Dennison, Michael Paolisso	Seats (Total: 20)
	Th 2:00pm - 4:45pm	HJP 1213B

MEES637 Zooplankton Ecology

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: MEES621; or permission of instructor. Credit only granted for: MEES698G, MEES637. Formerly: MEES698G.

A quantitative investigation of zooplankton ecology, emphasizing population dynamics and modeling, feeding, behavior, food-webs, and bio-physical interactions.

Taught at Horn Point Laboratories (HPL) and over the Interactive Video Network (IVN).

0101	James Pierson	Seats (Total: 20)
	MW 3:00pm - 4:20pm	HJP 1213B

MEES640 **Interconnected Earth Systems:Land, Ocean, and Estuary**

Credits: 3 Grading Method: Regular,
Audit

Explores the interconnected physical and biogeochemical systems of land, estuary, and ocean with cross cutting themes of human impacts and global change. Broad concepts will be combined with targeted interactive case studies to demonstrate how these systems are linked by humans, climate, and water.

Taught over the Interactive Video Network (IVN)

0101	Keith Eshleman, Mark Castro, Victoria Coles, Cindy Palinkas, Michael Gonsior	Seats (Total: 20)
	TuTh 11:00am - 12:20pm	HJP 1213B

MEES660 **Ecological Systems**

Credits: 3 Grading Method: Regular,
Audit

An introduction to the field of ecology is provided for matriculating graduate students and prepares them for more advanced concepts. Students will be exposed to ecology both in theory and practice through lectures, readings, and quantitative exercises, round table debates and discussions with current practitioners.

Taught over the Interactive Video Network (IVN)

0101	Mark Cochrane, Christopher Rowe	Seats (Total: 20)
	MW 12:30pm - 1:50pm	HJP 1213B

MEES680 **Cell and Molecular Biology for the Environmental Scientist- From Genes to Ecosystems**

Credits: 3 Grading Method: Regular,
Audit

Introduces environmental scientists to the methods and approaches that are the foundations for today's breakthroughs in molecular and cellular biology. Detailed examination of papers published in the last few years along with online background materials will be used to reinforce the connection of key concepts to experimentation.

Taught at IMET and over the Interactive Video Network (IVN)

0101	Allen Place, Yantao Li	Seats (Total: 20)
	MW 8:30am - 9:50am	HJP 1213B

MEES698B Special Topics in Marine-Estuarine-Environmental Sciences; Environmental Statistics I

Credits: 3 Grading Method: Regular,
 Audit

Credit according to time schedule and course organization. Lecture and/or laboratory series organized to study selected areas of environmental science not otherwise considered by existing courses. May be repeated for credit since topic coverage will change.

Taught at the Chesapeake Biological Laboratory and on the Interactive Video Network.

0101	Dong Liang	Seats (Total: 35)
	MW 10:00am - 11:20am	HJP 1213B
	M 11:30am - 11:50am	Location: TBA Discussion

MEES698E Special Topics in Marine-Estuarine-Environmental Sciences; Ecosystem Restoration

Credits: 3 Grading Method: Regular,
 Audit

Credit according to time schedule and course organization. Lecture and/or laboratory series organized to study selected areas of environmental science not otherwise considered by existing courses. May be repeated for credit since topic coverage will change.

Jointly offered with GEOL453 and GEOL789L. Overview of critical ecosystem functions across biomes/geologic settings emphasizing tradeoffs in restoration designs. Case studies illuminate structure's influence over biophysical and biogeochemical processes supporting ecosystems; the n show how properties of physical, chemical, and ecosystem processes can be altered by different restoration strategies, to optimize ecosystem services and habitat quality. Includes a semester research project.

0101	Sujay Kaushal	Seats (Total: 10)
	Tu 3:30pm - 6:30pm	CHE 2140

MEES698I Special Topics in Marine-Estuarine-Environmental Sciences; Chesapeake Bay Health

Credits: 3 Grading Method: Regular,
 Audit

Credit according to time schedule and course organization. Lecture and/or laboratory series organized to study selected areas of environmental science not otherwise considered by existing courses. May be repeated for credit since topic coverage will change.

Jointly offered with MEES498I. Credit only granted for MEES498I or MEES6 98I. Taught at Chesapeake Biological Laboratories (CBL) and over the Interactive Video Network (IVN).

0101	Carys Mitchelmore	Seats (Total: 20)
	Meets August 26, 2019 - December 17, 2019	
	TuTh 12:30pm - 1:50pm	HJP 1213B

MEES698K Special Topics in Marine-Estuarine-Environmental Sciences; Introduction to GIS

Credits: 2 Grading Method: Regular,
Audit

Credit according to time schedule and course organization. Lecture and/or laboratory series organized to study selected areas of environmental science not otherwise considered by existing courses. May be repeated for credit since topic coverage will change.

Restriction: Permission of Department. This class is self paced and not over IVN.

0101	Matthew Fitzpatrick	Seats (Total: 15)
	Meets August 26, 2019 - December 17, 2019	
	Contact instructor or department for details.	

MEES698M Special Topics in Marine-Estuarine-Environmental Sciences; Modeling Chemical Equilibrium in Natural Waters

Credits: 3 Grading Method: Regular,
Audit

Credit according to time schedule and course organization. Lecture and/or laboratory series organized to study selected areas of environmental science not otherwise considered by existing courses. May be repeated for credit since topic coverage will change.

Taught over the Interactive Video Network (IVN).

0101	Johan Schijf	Seats (Total: 20)
	MW 8:30am - 9:50am	HJP 1213C

MEES698R Special Topics in Marine-Estuarine-Environmental Sciences; Stable Isotopes in Environmental Research

Credits: 3 Grading Method: Regular,
Audit

Taught over the Interactive Video Network (IVN).

0101	Hali Kilbourne, Lee Cooper, David Nelson	Seats (Total: 20)
	TuTh 9:30am - 10:50am	HJP 1213C

MEE698X

Special Topics in Marine-Estuarine-Environmental Sciences; Global Environmental Remote Sensing

Credits: 3 Grading Method: Regular, Audit

Credit according to time schedule and course organization. Lecture and/or laboratory series organized to study selected areas of environmental science not otherwise considered by existing courses. May be repeated for credit since topic coverage will change.

Taught at Appalachian Laboratories (AL) and over the Interactive Video Network (IVN).

0101	Andrew Elmore, Gregory Silsbe	Seats (Total: 15)
	TuTh 12:30pm - 1:50pm	HJP 1213C

MEE699

Special Problems in Marine-Estuarine-Environmental Sciences

(Perm req)

Credits: 1-3 Grading Method: Regular, Audit

Research on specialized topics under the direction of individual faculty members.

Contact department for information to register for this course.

MEE5718D

Study Groups on Issues in Marine Estuarine Environmental Sciences; Diseases and Population Dynamics of Marine Organisms

Credits: 2 Grading Method: Regular, Audit

Active discussions on current environmental topics and issues. Efforts may result in manuscripts, technical report or innovative communication products.

Taught over the Interactive Video Network (IVN).

0101	Eric Schott, Michael Wilberg	Seats (Total: 20)
	Meets August 26, 2019 - December 17, 2019	
	Th 2:00pm - 3:50pm	Location: TBA

Study Groups on Issues in Marine Estuarine Environmental Sciences; Plastic Pollution: From Land and Ocean

Credits: 2 Grading Method: Regular, Audit

Active discussions on current environmental topics and issues. Efforts may result in manuscripts, technical report or innovative communication products.

Taught over the Interactive Video Network (IVN).

0101	Carys Mitchelmore, Helen Olde	Seats (Total: 15)
	Meets August 26, 2019 - December 17, 2019	
	F 1:00pm - 2:50pm	HJP 1213B

MEE5718W

Study Groups on Issues in Marine Estuarine Environmental Sciences; Classic Readings in Ecology

Credits: 2 Grading Method: Regular, Audit

Active discussions on current environmental topics and issues. Efforts may result in manuscripts, technical report or innovative communication products.

Taught over the Interactive Video Network (IVN).

0101	Katharina Engelhardt	Seats (Total: 15)
	Meets August 26, 2019 - December 17, 2019	
	F 1:00pm - 2:50pm	Location: TBA

MEE5799

Masters Thesis Research

Credits: 1-6 Grading Method: Regular
Contact department for information to register for this course.

MEE5898

Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular
Contact department for information to register for this course.

MEE5899

Doctoral Dissertation Research

(Perm req) Credits: 6 Grading Method: Regular
Contact department for information to register for this course.

MIEH225

Clinical Research Practicum: The CATCH the Virus Study

Credits: 3

Grading Method: Regular,
Audit

During this course, students will have the opportunity to gain broader insight into the development and implementation of a large-scale clinical research project, as well as gain hands-on experience working as research and clinical assistants in the CATCH study at all stages of data collection. After several weeks of training in the basics of clinical research, including a review study design, human subject research, and general lab and clinic safety, students will be trained on study protocols and given the opportunity to gain practical experience working in both the clinical and laboratory setting. Students will also enrich the conceptual and theoretical context of their work via discussion and critical analysis of relevant literature.

0101	Jennifer German	Seats (Total: 25)
	TuTh 9:30am - 10:45am	CCC 1200

MIEH300

A Public Health Perspective: Introduction to Environmental Health

Credits: 3

Grading Method: Regular

Prerequisite: Minimum grade of C- in CHEM131 and CHEM132; and must have completed or be concurrently enrolled in SPHL100 or PHSC300. Restriction: Must have earned a minimum of 60 credits. Credit only granted for: SPHL498N or MIEH300. Formerly: SPHL498N.

Environmental health is that branch of public health that deals with the human health effects of exposure to chemical, physical, and biological agents in the community, workplace, and home. Activities within Environmental Health Sciences are associated with recognizing, assessing, understanding, and mitigating the impacts of chemical, physical, and biological agents as well as understanding how human behavior and action impacts the environment. This course focuses on the central concepts, principles, issues, and applications of the essential scientific components and strategies of control of major environmental health problems.

0101	Kendall Bustad	Seats (Total: 20)
	MW 9:00am - 9:50am	SPH 1312
	W 10:00am - 11:50am	SPH 0116A Discussion
0102	Kendall Bustad	Seats (Total: 20)
	MW 9:00am - 9:50am	SPH 1312
	W 12:00pm - 1:50pm	SPH 0116A Discussion

0103	Kendall Bustad	Seats (Total: 20)	
	MW 9:00am - 9:50am	SPH 1312	
	W 2:00pm - 3:50pm	SPH 0116A	Discussion
0104	Kendall Bustad	Seats (Total: 20)	
	MW 9:00am - 9:50am	SPH 1312	
	W 4:00pm - 5:50pm	SPH 0116A	Discussion
0105	Kendall Bustad	Seats (Total: 20)	
	MW 9:00am - 9:50am	SPH 1312	
	F 8:00am - 9:50am	SPH 0116A	Discussion
0106	Kendall Bustad	Seats (Total: 20)	
	MW 9:00am - 9:50am	SPH 1312	
	F 10:00am - 11:50am	SPH 0116A	Discussion
0107	Kendall Bustad	Seats (Total: 20)	
	MW 9:00am - 9:50am	SPH 1312	
	F 12:00pm - 1:50pm	SPH 0116A	Discussion
ESG1	Andre Markon	Seats (Total: 35)	
	Tu 4:30pm - 7:00pm	BLD3 2230	
	Class time/details on ELMs	ONLINE	Discussion
<i>Restricted to Shady Grove students in the Public Health Sciences major.</i>			

MIEH309

(Perm req)

Environmental Health Research

Credits: 1-3

Grading Method: Regular

This research-based course will provide undergraduates with the opportunity to work closely with one of the faculty researchers in the Maryland Institute for Applied Environmental Health (MIAEH) within the School of Public Health. Our research covers multiple fields within the environmental health sciences (e.g. environmental epidemiology, exposure science, risk assessment, environmental microbiology, environmental microbial genomics, food toxicology, airborne infection transmission, environmental justice, and children's environmental health) that involve either laboratory-based research or non-laboratory based studies. Students will not only gain invaluable research and interpersonal skills but also contribute to MIAEH's ongoing environmental health research programs.

0201	Paul Turner	Seats (Total: 5)	
	Contact instructor or department for details.		
0202	Amir Sapkota	Seats (Total: 5)	
	Contact instructor or department for details.		

0203	Amy Sapkota	Seats (Total: 5)
	Contact instructor or department for details.	
0204	Jennifer German, Donald Milton	Seats (Total: 25)
	Contact instructor or department for details.	
0205	Robin Puett	Seats (Total: 5)
	Contact instructor or department for details.	
0206	Sacoby Wilson	Seats (Total: 5)
	Contact instructor or department for details.	
0207	Kristin Cipriani	Seats (Total: 5)
	Contact instructor or department for details.	
0208	Lesliam Quiros Alcala	Seats (Total: 5)
	Contact instructor or department for details.	
0209	Devon Payne-Sturges	Seats (Total: 5)
	Contact instructor or department for details.	
0210	Muhiuddin Haider	Seats (Total: 5)
	Contact instructor or department for details.	

MIEH321

Syphilis to SARS: Climate Change, Development and Emergence of Infectious Diseases

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Examines the influences of environmental factors, economic development, migration, and land use changes on emergence and reemergence of infectious diseases. Explores how population growth, development, and climate change impact natural reservoirs of infectious diseases and how they are transmitted through human populations. Includes historical accounts, newly emerging and reemerging diseases.

0101	Sara Bazaco	Seats (Total: 30)
	W 5:00pm - 7:30pm	SPH 0121
ESG1	Michael Bazaco	Seats (Total: 35)
	W 6:00pm - 8:30pm	BLD3 2226
	<i>Restricted to Shady Grove students in the Public Health Sciences major.</i>	

MIEH400

Introduction to Global Health

Credits: 3

Grading Method: Regular

General Education: DVUP

Prerequisite: Minimum grade of C- in MIEH300; and 1 course with a minimum grade of C- from (SPHL100, PHSC300). Restriction: Must be in the Public Health Science program or must have permission of the program director; and must have completed 60 credits. Credit only granted for: MIEH400 or SPHL498A. Formerly: SPHL498A.

Exploration of theoretical frameworks and practical perspectives on issues shaping the global health panorama. Determinants examined through: biological and epidemiological; social, cultural and economic; environmental and geographic; multi-section, legal and institutional perspectives with synopsis of how these issues are addressed by international and community organizations in developing countries.

0101	Amir Sapkota MW 4:00pm - 4:50pm Th 11:00am - 11:50am	Seats (Total: 20) ESJ 2208 SPH 0116B	Discussion
0102	Amir Sapkota MW 4:00pm - 4:50pm Th 12:30pm - 1:20pm	Seats (Total: 20) ESJ 2208 SPH 0116B	Discussion
0103	Amir Sapkota MW 4:00pm - 4:50pm Th 2:00pm - 2:50pm	Seats (Total: 20) ESJ 2208 SPH 0116B	Discussion
0104	Amir Sapkota MW 4:00pm - 4:50pm M 9:00am - 9:50am	Seats (Total: 20) ESJ 2208 SPH 0116B	Discussion
0105	Amir Sapkota MW 4:00pm - 4:50pm M 10:00am - 10:50am	Seats (Total: 20) ESJ 2208 SPH 0116B	Discussion
0106	Amir Sapkota MW 4:00pm - 4:50pm M 11:00am - 11:50am	Seats (Total: 20) ESJ 2208 SPH 0116B	Discussion
0107	Amir Sapkota MW 4:00pm - 4:50pm M 12:00pm - 12:50pm	Seats (Total: 20) ESJ 2208 SPH 0116B	Discussion

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: HLTH761 or MIEH600. Formerly: HLTH761.

Overview of the chemical, physical and biological hazards present in our living and working environment and their effects on human health. Topics include: exposure assessment, industrial hygiene and safety, pesticides, community and indoor pollution, food-borne diseases, solid and hazardous wastes, water resources, risk assessment, ecological issues and environmental laws.

0101	Paul Turner	Seats (Total: 20)
	F 1:00pm - 3:45pm	ATL 0201

MIEH605 Fundamentals of Global Health

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: SPHL600 or SPHL698A. Formerly: SPHL698A.

Exploration of theoretical frameworks and practical perspectives in global health with particular attention to the analysis of the biological, epidemiological, social, cultural and behavioral interactions that affect global health study and project implementation. The emphasis is on innovative solutions to health issues in underserved populations.

GH01	Muhiuddin Haider	Seats (Total: 20)
	W 5:00pm - 7:00pm	ATL 0201
	Class time/details on ELMs	ONLINE

MIEH609 Methods in Environmental Health

Credits: 1-3 Grading Method: Regular

This research-based rotation in environmental health sciences will provide graduate students with the opportunity to work closely with faculty researchers in the Maryland Institute for Applied Environmental Health (MIAEH) within the School of Public Health. Our research covers multiple fields within the environmental health sciences (e.g. environmental epidemiology, exposure science, risk assessment, environmental microbiology, environmental microbiology, environmental microbial genomics, food toxicology, airborne infection transmission, environmental justice, and children's environmental health) that involve either laboratory-based research or non-laboratory based studies. Students will not only gain invaluable research experience and interpersonal skills but also contribute to MIAEH's ongoing environmental health research programs.

0201	Paul Turner	Seats (Total: 5)
	Contact instructor or department for details.	

0202	Amir Sapkota	Seats (Total: 5)
	Contact instructor or department for details.	
0203	Amy Sapkota	Seats (Total: 5)
	Contact instructor or department for details.	
0204	Donald Milton	Seats (Total: 5)
	Contact instructor or department for details.	
0205	Robin Puett	Seats (Total: 5)
	Contact instructor or department for details.	
0206	Sacoby Wilson	Seats (Total: 5)
	Contact instructor or department for details.	
0207	Lesliam Quiros Alcala	Seats (Total: 5)
	Contact instructor or department for details.	
0208	Devon Payne-Sturges	Seats (Total: 5)
	Contact instructor or department for details.	

MIEH688
Seminar in the Maryland Institute for Applied Environmental Health: Current Topics in Environmental Health

Credits: 1

Grading Method: Sat-Fail

Invited and in-house research presentations from guest scientists, faculty members, and students, and critical analysis of journal articles on current topics in environmental and occupational health.

0101	Donald Milton	Seats (Total: 10)
	Tu 11:00am - 11:50am	SPH 2234CC

MIEH691
UMD Global STEWARDS: Project-Based Data Practicum at the Nexus of Food, Energy, and Water Systems

Credits: 3

Grading Method: Regular,
Audit

Restriction: Permission of instructor.

This course is framed around a range of food-energy-water (FEW) systems challenges from local to global scales. During the semester, students will gain real-world experience by participating in the conceptualization and/or conduct of an interdisciplinary FEW systems project. Projects may employ engineering, life sciences, epidemiological or policy approaches; earth system sciences frameworks; computational methods; and/or other innovative approaches. Through this work, students will gain hands-on experience in study design, research methods and data analysis across varying FEW disciplines. Each student will bring a diverse set of expertise to the projects, creating a microcosm for interdisciplinary team science. During the course, students will also have the opportunity to refine oral and written communication skills, including team writing. The deliverable for the course may include a draft grant proposal, a manuscript, an Op-Ed, or another actionable type of science/policy writing.

Credit only granted for MIEH691 or ENST691.

0101	Stephanie Lansing	Seats (Total: 20)
	W 2:00pm - 4:45pm	PLS 1172

MIEH699 UMD Global STEWARDS: Seminal Findings, and Research and Policy in Progress at the Food, Energy, Water Nexus

Credits: 1 Grading Method: Sat-Fail,
Audit

Engaging discourse covering seminal findings, as well as research and policy in progress at the food, energy, water (FEW) nexus. Course meetings will include dissections of groundbreaking FEW nexus articles; presentations by faculty members and students, followed by interdisciplinary discussions; and presentations by visiting leaders working at the FEW nexus across career sectors.

0101	Amy Sapkota	Seats (Total: 15)
	W 12:00pm - 1:00pm	SPH 0112

MIEH730 Environmental Justice, Built Environment, and Health Disparities

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have completed an Environmental Health course.

This course will give students the opportunity to conduct an in-depth analysis of environmental justice and environmental racism in the United States and internationally. Students will synthesize their knowledge from environmental science courses with the concepts of civil rights and social justice to more fully understand the existing health disparities and how the built environment contributes to them.

0101	Sacoby Wilson	Seats (Total: 15)
	W 4:00pm - 6:45pm	EGR 1110

MIEH735 Food Toxicology

Credits: 3 Grading Method: Regular, Audit

Recommended: BCHM462, BSCI440, or CHEM131. Cross-listed with NFSC735. Credit only granted for: MIEH735 or NFSC735.

An introduction to basic concepts in toxicology in relation to toxic food contaminants and additives; both synthetic and naturally occurring. Focus on exposure routes, molecular targets and susceptible individuals. Also includes regulatory toxicology with respect food toxins.

0101	Paul Turner, Robert Buchanan	Seats (Total: 20)
	W 1:00pm - 3:45pm	EGR 3102

MIEH740 Environmental Health Risk Assessment

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: MIEH600; or permission of instructor.

Review of the major methods of human and ecological risk assessment conducted by the U.S. Environment Protection Agency. Emphasis on sources of uncertainty.

0101	Abdel-Razak Kadry	Seats (Total: 15)
	M 4:00pm - 6:45pm	SPH 0305

MIEH778 Internship in Public Health

(Perm req)

Credits: 1-4 Grading Method: Regular, Audit

Internship and seminar providing an opportunity to apply previously acquired knowledge and skills in a health or allied health organization. Setting of the internship will depend upon the student's background and career goals.

0201	Paul Turner	Seats (Total: 5)
	Contact instructor or department for details.	

MIEH783 Proposal Development and Marketing for Public Health Scientists

Credits: 3 Grading Method: Regular, Audit

Every scientist, whether in academia, government, or industry, must write compelling proposals if they are to succeed in having resources to pursue their passions and interests. To write a compelling proposal, we must develop clear and concise hypotheses and definitive ways to test them. But to have an impact, to get funded, to graduate, we must also excel at marketing our ideas and our achievements to other scientists and the public. This course is designed for doctoral students and postdoctoral fellows who want to develop and hone their proposal development and marketing skills.

0101	Donald Milton	Seats (Total: 10)
	Tu 1:30pm - 3:30pm	SPH 0227
	Class time/details on ELMs	ONLINE

MIEH786

Capstone Project in Public Health

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Permission of SPHL-Maryland Institute for Applied Environmental Health.

Capstone experience providing opportunity to apply knowledge and skills to a specific public health problem or issue. Completion of project relevant to public health under the direction of an advisor.

0201	Paul Turner	Seats (Total: 5)
	Contact instructor or department for details.	
0202	Amir Sapkota	Seats (Total: 5)
	Contact instructor or department for details.	
0203	Amy Sapkota	Seats (Total: 5)
	Contact instructor or department for details.	
0204	Donald Milton	Seats (Total: 5)
	Contact instructor or department for details.	
0205	Robin Puett	Seats (Total: 5)
	Contact instructor or department for details.	
0206	Sacoby Wilson	Seats (Total: 5)
	Contact instructor or department for details.	
0207	Lesliam Quiros Alcala	Seats (Total: 5)
	Contact instructor or department for details.	
0208	Devon Payne-Sturges	Seats (Total: 5)
	Contact instructor or department for details.	

0209

Stephen Roth

Seats (Total: 5)

Contact instructor or department for details.

MIEH788**Critical Readings in Environmental Health**

Credits: 1-3

Grading Method: Regular,
Audit*In-depth examination and critical discussion of the current literature relevant to environmental health.***Contact department for information to register for this course.****MIEH789****Independent Study**

(Perm req)

Credits: 1-6

Grading Method: Regular,
Audit*Individual reading and/or research under a specific faculty member in the department.***Contact department for information to register for this course.****MIEH799****Master's Thesis Research**

(Perm req)

Credits: 1-6

Grading Method: Regular, Sat-
Fail**Contact department for information to register for this course.****MIEH898****Pre-Candidacy Research**

(Perm req)

Credits: 1-8

Grading Method: Regular

Contact department for information to register for this course.**MIEH899****Doctoral Dissertation Research**

(Perm req)

Credits: 1-8

Grading Method: Regular, Sat-
Fail**Contact department for information to register for this course.****MITH****Maryland Institute for Technology
in the Humanities****Fall 2019****MITH388T****Digital Humanities Research Assistantship; Maryland Institute for Technology in the Humanities
Internships**

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail

An applied introduction to the theory and practice of digital research. The internship includes regular meetings with MITH staff, including designers, developers, information professionals, project managers, and faculty, to gain knowledge of existing digital scholarship and resources within the arts and humanities. Students may contribute to existing MITH projects or propose a small, independent research project on which they will receive support from MITH staff.

0101	Purdom Lindblad	Seats (Total: 5)
	Contact instructor or department for details.	

MITH729 Colloquium in Digital Studies

(Perm req)

Credits: 1 Grading Method: Sat-Fail

Colloquium in support of the ARHU-MITH Graduate Certificate in Digital Studies. We will meet periodically (approximately 4-5 times a semester) to read and discuss current work in the field, interact with visiting speakers, share work in progress, learn new tools and methods, and hear research presentations from one another.

Class meets in TWS 3136 on the following dates: 9/8, 10/6, 11/3, 12/8.

0101	Matthew Kirschenbaum	Seats (Total: 20)
	F 3:00pm - 5:00pm	Location: TBA

MITH735 Anatomy of Digital Humanities Research

Credits: 3 Grading Method: Regular,
Audit

Positioned as a companion to a disciplinary research methods course, this course emphasizes best practices and critical approaches in the context of the lifecycle of a collaborative research project from ideation to publication to preservation. This course explores common digital methodologies as it teaches collaboration and fast prototyping to help students develop a reflexive critical approach to digital research projects. Upon completing the course, students will have a research plan, including the beginnings of a literature review, wireframes, and proposal for the lifecycle of the research project.

0101	Purdom Lindblad	Seats (Total: 20)
	W 1:00pm - 3:30pm	HBK 0301

MLAW MPower Undergraduate Law Programs

Fall 2019

MLAW100 Justice and the Law

Credits: 3 Grading Method: Regular

General Education: DSHS

Restriction: Course enrollment is restricted to students in the College Park Scholars Justice and Legal Thought Program (CPJT).

An exploration into the relationship between justice and law, including psychological, philosophical, political and legal approaches to justice, as well as an analytical framework for understanding human rights.

Restricted to College Park Scholars students in the Justice & Legal Thought Program.

0101	Robert Koulish	Seats (Total: 28)	
	TuTh 11:00am - 11:50am	CCC 1205	
	F 9:00am - 9:50am	CCC 1100	Discussion
0102	Robert Koulish	Seats (Total: 28)	
	TuTh 11:00am - 11:50am	CCC 1205	
	F 10:00am - 10:50am	CCC 1100	Discussion
0103	Robert Koulish	Seats (Total: 27)	
	TuTh 11:00am - 11:50am	CCC 1205	
	F 11:00am - 11:50am	CCC 1100	Discussion

MLAW304

Introduction to Law and Social Inquiry

Credits: 3

Grading Method: Regular

General Education: DSSP

Restriction: Must be in the Law and Society (MLAW) minor.

An exploration of the relationship between law and society from an interdisciplinary perspective. Major themes cover the impact of law on society, society on law and social change.

0101	Michael Spivey	Seats (Total: 79)	
	TuTh 9:30am - 10:45am	TYD 2109	

MLAW358C

Selected Topics in Law and Society; The Supreme Court and the Constitution

Credits: 3

Grading Method: Regular

An interdisciplinary exploration of topics in law and society. Major scholarly interpretations of specific substantive fields of law.

Jointly offered with GVPT439C. Credit only granted for MLAW358C or GVPT4 39C.

0101	Michael Spivey	Seats (Total: 5)	
	MW 1:00pm - 2:15pm	TYD 1101	

MLAW358F Selected Topics in Law and Society; First Amendment: Free Speech, Religion, and the Constitution

Credits: 3 Grading Method: Regular

An interdisciplinary exploration of topics in law and society. Major scholarly interpretations of specific substantive fields of law.

Jointly offered with GVPT439B. Credit only granted for MLAW358F or GVPT439B.

0101	Michael Spivey	Seats (Total: 5)
	MW 3:00pm - 4:15pm	SQH 1120

MLAW358L Selected Topics in Law and Society; Love and the Law

Credits: 3 Grading Method: Regular

An interdisciplinary exploration of topics in law and society. Major scholarly interpretations of specific substantive fields of law.

Explores the interplay of love and the law through a law & society lens that recognizes the role of law-on-the-books as well as law-in-action. Students will explore a variety of family law doctrines from parenthood through reproductive technologies and adoption to partnership through cohabitation and marriage, asking in each context who benefits and controls from contracts in families, whether those agreements are open or hidden, whether they are legally binding.

0101	Martha Ertman	Seats (Total: 24)
	Tu 3:30pm - 6:00pm	ASY 3203

MLAW358N Selected Topics in Law and Society; Cities, Crimes, and the Constitution

Credits: 3 Grading Method: Regular

An interdisciplinary exploration of topics in law and society. Major scholarly interpretations of specific substantive fields of law.

Jointly offered with GVPT439E. Credit granted for MLAW358N or GVPT439E.

0101	Robert Koulish, Thiruvendran Vignarajah	Seats (Total: 120)
	Tu 3:30pm - 6:00pm	ASY 2203

MLAW358O Selected Topics in Law and Society; Special Topics in Global Environmental Law

Credits: 3 Grading Method: Regular

An interdisciplinary exploration of topics in law and society. Major scholarly interpretations of specific substantive fields of law.

This course explores how legal systems throughout the world are responding to environmental problems, including climate change, air pollution, water supply, and waste disposal, and the legal and political factors that shape regulatory policies. It examines the roles played by government agencies, the judiciary, and citizen groups in the development, implementation and enforcement of environmental law.

0101	Robert Percival	Seats (Total: 20)
	MW 2:00pm - 3:15pm	SQH 1121

MLAW358U Selected Topics in Law and Society; The Politics of Immigration Law

Credits: 3 Grading Method: Regular

An interdisciplinary exploration of topics in law and society. Major scholarly interpretations of specific substantive fields of law.

The course will introduce students to the tension between immigration law and the rule of law. Students will learn how immigration law is highly unusual in the field of public law in the latitude it affords policy makers to embark on actions that would be considered unconstitutional if applied to citizens. The class will focus on contemporary topics, including the Travel Ban, Border Wall, Family Separation, DACA, and more, with a particular focus on the criminalization of immigration.

0101	Robert Koulisch	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	MCB 1207

MLAW358X Selected Topics in Law and Society; Introduction to Constitutional Law

Credits: 3 Grading Method: Regular

An interdisciplinary exploration of topics in law and society. Major scholarly interpretations of specific substantive fields of law.

Jointly offered with GVPT431. Credit only granted for GVPT431 or MLAW358 X.

0101	Martin Kobren	Seats (Total: 5)
	MW 1:00pm - 2:15pm	TYD 2109

MLAW388 Law and Society Internship

Credits: 1-4 Grading Method: Regular

Participation in the Law and Society Internship (LASI) offers students the opportunity to enhance their education through practical skill building in the realm of law-related professionals.

Restricted to students within the Law and Society minor.

0101	Brandee Pettus	Seats (Total: 40)
	Class time/details on ELMs	ONLINE

MLSC MD Language Science Ctr Fall 2019

MLSC308 PULSAR Language Science Research Seminar

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Research seminar for students in the PULSAR language science program. Weekly presentations and discussions on diverse topics in language science research, as well as on developing research skills.

0101	Tess Wood	Seats (Total: 25)
	Contact instructor or department for details.	

MOCB Molecular and Cell Biology Fall 2019

MOCB608 Molecular and Cell Biology Seminar

(Perm req)

Credits: 1 Grading Method: Regular

Seminar in molecular and cell biology.

0101	Jonathan Dinman	Seats (Total: 12)
	Contact instructor or department for details.	

MOCB699 Laboratory Rotation

(Perm req)

Credits: 2-3 Grading Method: Sat-Fail

Laboratory experience in molecular-cell biology.

Contact department for information to register for this course.

MOCB898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Sat-Fail

Contact department for information to register for this course.

MOCB899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Contact department for information to register for this course.

MUED155 Fundamentals for the Classroom Teacher

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in one of the following programs (Early Childhood Education; Elementary Education) ; or must be a Pre-Elementary Education major; or must be a Pre-Early Childhood Education major.

The fundamentals of music theory and practice, related to the needs of the classroom and the kindergarten teacher.

0101	Yo-Jung Han	Seats (Total: 25)
	MW 4:15pm - 5:30pm	PAC 3160

MUED186 Pre-professional Experiences I

(Perm req) Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in Music Education program. Additional information: Fulfills the College of Arts and Humanities requirement for ARHU158.

An orientation into the role of the music teacher in the school and community. On-site school visits at elementary, middle and high school levels form the basis for discussion and exploration of all facets of the music education profession.

0101	Michael Hewitt	Seats (Total: 30)
	M 10:00am - 10:50am	PAC 2168
	F 9:00am - 10:50am	PAC 1230 Lab

MUED214 String Technique and Pedagogy II

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be a major in Music Education-instrumental option.

A study in violin, viola, cello and bass technique and pedagogy; intermediate to advanced level. Emphasizes group process playing and teaching, chamber music and individual technique development.

0101	Gene Pohl	Seats (Total: 25)
	MWF 10:00am - 10:50am	PAC 2540

MUED215**Woodwind Technique and Pedagogy**

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of ARHU-School of Music department.

Playing experience on instruments of the woodwind family. Historical and acoustical background. Basic concepts of teaching. Methods and materials. Techniques of individual and class instruction.

0101	Stephanie Prichard	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	PAC 2540

MUED320**Teaching Secondary Instrumental Music I**

(Perm req)

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MUED187. Restriction: Must be in Music Education program.

Prepare instrumental-emphasis music education majors to synthesize the knowledge and skills that will enable them to extend secondary-level musical skill through planned instruction and development of teaching materials.

0101	Stephanie Prichard	Seats (Total: 12)
	TuTh 9:30am - 10:45am	PAC 1230

MUED333**Classroom Vocal Pedagogy**

Credits: 2 Grading Method: Regular

Prerequisite: MUED187 and MUED186. Restriction: Must be in Music Education program.

An introduction to the fundamentals of group vocal pedagogy for the choral and general classroom teacher, including the teaching of posture, breathing, resonance, registration, articulation and foreign language diction as appropriate to needs of the child or adolescent singer in K-12 classroom settings.

0101	Kenneth Elpus	Seats (Total: 10)
	W 4:00pm - 6:30pm	PAC 2130A

MUED420**Teaching Secondary Instrumental Music II**

(Perm req)

Credits: 4 Grading Method: Regular,
Pass-Fail

General Education: DSSP

Prerequisite: MUED320 and MUED311. Restriction: Must be in Music Education program.

Prepare instrumental-emphasis music education majors to synthesize the knowledge and skills that will enable them to develop and/or maintain an exemplary, curricular-oriented, research-based, comprehensive secondary instrumental program.

0101	Michael Hewitt	Seats (Total: 20)
	Tu 9:00am - 11:00am	PAC 2540
	Contact instructor or department for details.	Location: TBA Lab
	Th 8:00am - 12:00pm	

MUED471**Teaching General Music**

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: MUED222 and MUED333. Restriction: Must be in Music Education program.

An examination of children's musical development via model teaching experiences. Students in this course will be involved in learning appropriate techniques and materials used to plan, deliver, and assess musical instruction effectively in general music settings for K-12 students. The focus is on how to implement a sequential, balanced, and comprehensive music curriculum (i.e., artistic processes: creating, performing, and responding) that emphasizes opportunities for students to construct their own learning.

0101	Yo-Jung Han	Seats (Total: 15)
	Tu 9:00am - 11:00am	PAC 2130A
	Contact instructor or department for details.	Location: TBA Lab
	Th 8:00am - 12:00pm	

MUED474**Field Experiences: Pre-Student Teaching**

(Perm req)

Credits: 2 Grading Method: Regular

Prerequisite: MUED420 and MUED411; or (MUED472 and MUED471). Restriction: Permission of ARHU-School of Music department; and senior standing.

Field experiences to fulfill teaching requirements in K-12 music teacher education program.

0101	Yo-Jung Han	Seats (Total: 15)
	Contact instructor or department for details.	

MUED484**Student Teaching in Elementary School: Music**

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Corequisite: MUED494. Restriction: Permission of ARHU-School of Music department; and must be in Music Education program.

Fulfills elementary teaching requirements in K-12 music teacher education program. Limited to music education majors who have previously applied.

0101	Kenneth Elpus	Seats (Total: 15)
Contact instructor or department for details.		

MUED494 Student Teaching in Secondary School: Music

(Perm req)

Credits: 6 Grading Method: Sat-Fail

Corequisite: MUED484. Restriction: Permission of ARHU-School of Music department; and must be in Music Education program.

Fulfill secondary teaching requirements in K-12 music teacher education program. Limited to music education majors who have previously applied.

Students must pay a \$750.00 student teaching fee.

0101	Kenneth Elpus	Seats (Total: 15)
Contact instructor or department for details.		

MUED690 Research Methods in Music and Music Education

(Perm req)

Credits: 3 Grading Method: Regular

The application of methods of research to problems in the fields of music and music education. The preparation of bibliographies and the written exposition of research projects in the area of the student's major interest.

0101	Kenneth Elpus	Seats (Total: 12)
	Tu 5:00pm - 7:30pm	PAC 2130A

MUED698V Current Trends in Music Education; Vocal Pedagogy for the Choral Conductor

(Perm req)

Credits: 2 Grading Method: Regular

A survey of current and emerging philosophies, methodologies and curricula in music education and their implementation. The influence of educational and social changes and the expanding musical scene upon the music programs for children of all ages and for teacher education.

0101	Kenneth Elpus	Seats (Total: 5)
	W 4:00pm - 6:30pm	PAC 2130A

MUED729 Doctoral Colloquium in Music Education

(Perm req)

Credits: 1

Grading Method: Sat-Fail,
Audit

For students in PhD Program in Music Education. Meets approximately 4-5 times per semester to read and discuss current work in the field, interact with visiting speakers, share work in progress, learn new tools and methods, and hear research presentations from one another

0101	Instructor: TBA	Seats (Total: 10)
Contact instructor or department for details.		

MUSC School of Music

Fall 2019

MUSC001 MUSP Course Evaluation

(Perm req)

Credits: 0

Grading Method:

Contact department for information to register for this course.

MUSC099 Performance Attendance

(Perm req)

Credits: 0

Grading Method: Sat-Fail

Performance attendance laboratory for undergraduate music majors.

0101	Luke Spence	Seats (Total: 150)
Contact instructor or department for details.		

MUSC102 Class Piano

(Perm req)

Credits: 2

Grading Method: Regular,
Pass-Fail, Audit

Functional piano training for beginners. Development of techniques for school and community playing. Basic piano techniques; chord, arpeggio and scale techniques; melody and song playing; simple accompaniments, improvisation for accompaniments and rhythms; sight reading and transposition and playing by ear.

For MUSC majors only.

0101	Hui How	Seats (Total: 14)
	TuTh 2:00pm - 3:15pm	PAC 1123
0201	Jiawei Yuan	Seats (Total: 14)
	MWF 11:00am - 11:50am	PAC 1123
0301	Natnaree Suwanpotipra	Seats (Total: 14)
	MWF 1:00pm - 1:50pm	PAC 1123

0401	Hui How	Seats (Total: 14)
	TuTh 3:15pm - 4:30pm	PAC 1123

MUSC102B Class Piano

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Functional piano training for beginners. Development of techniques for school and community playing. Basic piano techniques; chord, arpeggio and scale techniques; melody and song playing; simple accompaniments, improvisation for accompaniments and rhythms; sight reading and transposition and playing by ear.

0101	Natnaree Suwanpotipra	Seats (Total: 14)
	TuTh 11:00am - 12:15pm	PAC 1123

MUSC106 Beginning Classical Guitar

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Introduction to classical guitar notation, technique, literature and performance. No previous musical experience required.

For students with no previous musical experience.

0101	Gerard Kunkel	Seats (Total: 12)
	MW 11:00am - 11:50am	PAC 1230

MUSC123 Movement for Singers

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Permission of ARHU-School of Music department.

Systematic exercises, improvisations and dances in conjunction with artistic vocal expression. Performance and critique of stage deportment, gestures and recital techniques.

0101	Carmen Balthrop	Seats (Total: 15)
	Tu 6:15pm - 7:45pm	TWS 1121

MUSC127 Vocal Diction: Italian

(Perm req)

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Permission of ARHU-School of Music department. Restriction: Must be in a major within the ARHU-School of Music department.

Augmentation of private voice study. Phonetics and diction for singers of Italian vocal literature.

0101	Diba Alvi	Seats (Total: 15)
	TuTh 2:00pm - 2:50pm	PAC 3164

MUSC128

Sight Reading For Pianists

(Perm req)

Credits: 2

Grading Method: Regular,
Pass-Fail, Audit

A course to give the piano major an opportunity to develop proficiency in sight reading at the keyboard.

0101	Natnaree Suwanpotipra	Seats (Total: 5)
	MW 10:00am - 10:50am	PAC 1123

MUSC129A

Ensemble; Chamber Music - Strings

(Perm req)

Credits: 1

Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

For MUSC majors only.

0101	David Salness	Seats (Total: 45)	
	TuTh 11:00am - 12:15pm	PAC 2201	Lab
1001	Sally McLain	Seats (Total: 10)	
	TuTh 11:00am - 12:15pm	Location: TBA	Lab
1101	Kenneth Slowik	Seats (Total: 10)	
	TuTh 11:00am - 12:15pm	Location: TBA	Lab

MUSC129B

Ensemble; Chamber Woodwinds

(Perm req)

Credits: 1

Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

For MUSC majors only.

0101	Mark Hill	Seats (Total: 40)	
	TuTh 11:00am - 12:15pm	PAC 2201	Lab

MUSC129C Ensemble; Chamber Music - Brasses

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

For MUSC majors only.

0101	Gregory Miller	Seats (Total: 30)	
	TuTh 11:00am - 12:15pm	PAC 2201	Lab
0701	Luke Spence	Seats (Total: 5)	
	TuTh 11:00am - 12:15pm	Location: TBA	Lab

MUSC129G Ensemble; Balinese Gamelan

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	I Suadin	Seats (Total: 20)	
	Th 7:00pm - 8:30pm	PAC 1230	Lab

MUSC129K Ensemble; Japanese Koto

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Kyoko Okamoto	Seats (Total: 10)	
	Tu 5:30pm - 7:00pm	PAC 3160	Lab

MUSC129L Ensemble; Advanced Japanese Koto

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Kyoko Okamoto	Seats (Total: 4)	
	Tu 7:00pm - 8:30pm	PAC 3160	Lab

MUSC129P Ensemble; Percussion

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Lee Hinkle	Seats (Total: 15)	
	M 5:00pm - 7:30pm	PAC 2540	Lab
	W 5:15pm - 7:15pm	PAC 2540	Lab

MUSC129Q Ensemble; Korean Percussion Ensemble

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Sebastian Wang	Seats (Total: 17)	
	Th 7:00pm - 8:30pm	PAC 2170	

MUSC129U Ensemble; Tuba & Euphonium

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Craig Potter	Seats (Total: 20)
	Contact instructor or department for details.	

MUSC140

Music Fundamentals I

Credits: 3 Grading Method: Regular, Audit CORE: HA General Education: DSSP

Restriction: Must not be in any of the following programs (Music (Professional Program); Music Education).

Introductory theory course. Notation, scales, intervals, triads, rhythm, form and basic aural skills.

0101	Alexander Devereux	Seats (Total: 12)
	MW 11:00am - 11:50am	PAC 2168
	F 10:00am - 10:50am	PAC 1108 Discussion
0102	Alexander Devereux	Seats (Total: 13)
	MW 11:00am - 11:50am	PAC 2168
	F 11:00am - 11:50am	PAC 1108 Discussion
0201	Alexander Devereux	Seats (Total: 12)
	MW 12:00pm - 12:50pm	PAC 2168
	F 12:00pm - 12:50pm	PAC 1108 Discussion
0202	Alexander Devereux	Seats (Total: 13)
	MW 12:00pm - 12:50pm	PAC 2168
	F 9:00am - 9:50am	PAC 1108 Discussion
FC01	Michael Oberhauser	Seats (Total: 13)
	Tu 3:00pm - 4:15pm	PAC 3160
	Th 3:00pm - 4:15pm	PAC 1108 Lab
	<i>Restricted to students in Freshmen Connection.</i>	

MUSC150

Theory of Music I

(Perm req)

Credits: 3 Grading Method: Regular, Audit

Prerequisite: Departmental audition and entrance examination. Restriction: Must be in one of the following programs (Music (Liberal Arts Program); Music (Jazz Performance Option); Music (Winds & Percussions Performance Option); Music (Voice Performance Option); Music Composition; Music (Professional Program); Music (Piano Performance Option); Music Performance-Winds and Percussion; Music Theory and Composition; Music Performance-Piano; Music Performance-Jazz Studies; Music Performance-Voice; Music Performance-Strings; Music (Strings Performance Option)).

A study of basic concepts and skills in tonal melody and harmony through analysis and composition.

0101	Richard Layton	Seats (Total: 6)
	MWF 8:00am - 8:50am	PAC 2160
	TuTh 8:25am - 9:15am	PAC 2160 Lab
0102	Richard Layton	Seats (Total: 6)
	MWF 8:00am - 8:50am	PAC 2160
	TuTh 9:30am - 10:20am	PAC 2160 Lab
0201	Richard Layton	Seats (Total: 11)
	MWF 9:00am - 9:50am	PAC 2160
	TuTh 8:25am - 9:15am	PAC 2164 Lab
0202	Richard Layton	Seats (Total: 11)
	MWF 9:00am - 9:50am	PAC 2160
	TuTh 9:30am - 10:20am	PAC 2164 Lab
0301	Michael Oberhauser	Seats (Total: 11)
	MWF 10:00am - 10:50am	PAC 2160
	TuTh 8:25am - 9:15am	PAC 2168 Lab
0302	Michael Oberhauser	Seats (Total: 11)
	MWF 10:00am - 10:50am	PAC 2160
	TuTh 9:30am - 10:20am	PAC 2168 Lab

MUSC202

Intermediate Class Piano I

(Perm req)

Credits: 2

Grading Method: Regular

Prerequisite: MUSC103; or must have equivalent piano training.

Advanced keyboard techniques. Continuation of skills introduced in MUSC103. Transposition, modulation and sight reading; methods of teaching functional piano.

Only for voice and instrumental principals with limited piano experience.

0101	Jiawei Yuan	Seats (Total: 15)
	MWF 9:00am - 9:50am	PAC 1123

MUSC204

Popular Music in Black America

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHU,
DVUP

Traces black popular music in the U.S. with a special focus on spirituals, ragtime, the blues, early jazz, R&B, Motown, funk, soul, and rap. Examines how these styles have been borrowed by the American music industry.

0101	Nicole Powlison	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	MMH 1400	
	F 9:00am - 9:50am	PAC 3168	Discussion
0102	Nicole Powlison	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	MMH 1400	
	F 10:00am - 10:50am	PAC 3168	Discussion
0103	Nicole Powlison	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	MMH 1400	
	F 11:00am - 11:50am	PAC 3168	Discussion
0104	Nicole Powlison	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	MMH 1400	
	F 9:00am - 9:50am	PAC 3160	Discussion
0105	Nicole Powlison	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	MMH 1400	
	F 10:00am - 10:50am	PAC 3160	Discussion
0106	Nicole Powlison	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	MMH 1400	
	F 11:00am - 11:50am	PAC 3160	Discussion
0107	Nicole Powlison	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	MMH 1400	
	F 9:00am - 9:50am	HBK 0108	Discussion

0108	Nicole Powlison	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	MMH 1400	
	F 10:00am - 10:50am	HBK 0108	Discussion
0109	Nicole Powlison	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	MMH 1400	
	F 11:00am - 11:50am	HBK 0108	Discussion

MUSC205

History of Popular Music, 1950-Present

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HA General Education: DSHU

A historical survey of rock music (blues, rock, soul, metal, rap, etc.) from circa 1950 to the present, with emphasis on popular music as music and popular music as social history.

0101	Richard King	Seats (Total: 20)	
	MW 11:00am - 11:50am	ARC 0204	
	F 9:00am - 9:50am	PAC 2164	Discussion
0102	Richard King	Seats (Total: 20)	
	MW 11:00am - 11:50am	ARC 0204	
	F 10:00am - 10:50am	PAC 2164	Discussion
0103	Richard King	Seats (Total: 20)	
	MW 11:00am - 11:50am	ARC 0204	
	F 11:00am - 11:50am	PAC 2164	Discussion
0104	Richard King	Seats (Total: 20)	
	MW 11:00am - 11:50am	ARC 0204	
	F 9:00am - 9:50am	PAC 2168	Discussion
0105	Richard King	Seats (Total: 20)	
	MW 11:00am - 11:50am	ARC 0204	
	F 10:00am - 10:50am	PAC 2168	Discussion
0106	Richard King	Seats (Total: 20)	
	MW 11:00am - 11:50am	ARC 0204	
	F 11:00am - 11:50am	PAC 2168	Discussion

0107	Richard King MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 20) ARC 0204 PAC 2200	Discussion
0108	Richard King MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 20) ARC 0204 PAC 2200	Discussion
0109	Richard King MW 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 20) ARC 0204 PAC 2200	Discussion
0110	Richard King MW 11:00am - 11:50am F 9:00am - 9:50am	Seats (Total: 20) ARC 0204 PAC 3164	Discussion
0111	Richard King MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 20) ARC 0204 PAC 3164	Discussion
0112	Richard King MW 11:00am - 11:50am F 11:00am - 11:50am	Seats (Total: 20) ARC 0204 PAC 3164	Discussion

MUSC210

The Impact of Music on Life

Credits: 3

Grading Method: Regular

CORE: HA, D

General Education: DSHU,
DVUP

Credit only granted for: MUET210 or MUSC210. Formerly: MUET210.

Music as a part of culture. Materials drawn from traditions throughout the globe to illustrate issues of historical and contemporary significance, including the impact of race, class and gender on the study of music.

0101	Fernando Rios MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 20) ARC 0204 PAC 1809	Discussion
0102	Fernando Rios MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 20) ARC 0204 PAC 1809	Discussion

0103	Fernando Rios MW 1:00pm - 1:50pm F 12:00pm - 12:50pm	Seats (Total: 20) ARC 0204 PAC 1809	Discussion
0104	Fernando Rios MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 20) ARC 0204 PAC 1809	Discussion
0105	Fernando Rios MW 1:00pm - 1:50pm F 2:00pm - 2:50pm	Seats (Total: 20) ARC 0204 PAC 1809	Discussion
0106	Fernando Rios MW 1:00pm - 1:50pm F 3:00pm - 3:50pm	Seats (Total: 20) ARC 0204 PAC 1809	Discussion
0107	Fernando Rios MW 1:00pm - 1:50pm F 12:00pm - 12:50pm	Seats (Total: 20) ARC 0204 PAC 2168	Discussion
0108	Fernando Rios MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 20) ARC 0204 PAC 2168	Discussion
0109	Fernando Rios MW 1:00pm - 1:50pm F 2:00pm - 2:50pm	Seats (Total: 20) ARC 0204 PAC 2168	Discussion
0110	Fernando Rios MW 1:00pm - 1:50pm F 12:00pm - 12:50pm	Seats (Total: 20) ARC 0204 PAC 3168	Discussion
0111	Fernando Rios MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 20) ARC 0204 PAC 3168	Discussion
0112	Fernando Rios MW 1:00pm - 1:50pm F 2:00pm - 2:50pm	Seats (Total: 20) ARC 0204 PAC 3168	Discussion

Credits: 3 Grading Method: Regular, Audit CORE: HA, D General Education: DSHU, DVUP

Credit only granted for: MUET200 or MUSC215. Formerly: MUET200.

Focus on popular musics in different cultures with an emphasis on cross-cultural comparisons and analysis of how musics and identity intersect.

0101	Laura Schnitker MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 20) SKN 0200 EDU 2101	Discussion
0102	Laura Schnitker MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 20) SKN 0200 EDU 2101	Discussion
0103	Laura Schnitker MW 12:00pm - 12:50pm F 2:00pm - 2:50pm	Seats (Total: 20) SKN 0200 EDU 2101	Discussion
0104	Laura Schnitker MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 20) SKN 0200 KNI 1103	Discussion
0105	Laura Schnitker MW 12:00pm - 12:50pm F 2:00pm - 2:50pm	Seats (Total: 20) SKN 0200 KNI 1103	Discussion
0106	Laura Schnitker MW 12:00pm - 12:50pm F 3:00pm - 3:50pm	Seats (Total: 20) SKN 0200 KNI 1103	Discussion
0107	Laura Schnitker MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 20) SKN 0200 EDU 2119	Discussion
0108	Laura Schnitker MW 12:00pm - 12:50pm F 12:00pm - 12:50pm	Seats (Total: 20) SKN 0200 EDU 2119	Discussion
0109	Laura Schnitker MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 20) SKN 0200 EDU 2119	Discussion

MUSC220 Selected Musical Cultures of the World

Credits: 3

Grading Method: Regular

CORE: HA, D

General Education: DSHU,
DVUP*Credit only granted for: MUET220 or MUSC220. Formerly: MUET220.**A survey of selected musical cultures of the world, such as India, Japan, China, Indonesia, West Africa, Eastern Europe and the Near East.*

FC01	Lars Helgert	Seats (Total: 30)
	MW 4:30pm - 5:45pm	ASY 3203

MUSC227 Vocal Diction: German

(Perm req)

Credits: 1

Grading Method: Regular

*Prerequisite: Permission of ARHU-School of Music department. Restriction: Must be in a major within ARHU-School of Music department.**Augmentation of private study. Phonetics and diction for singers of German vocal literature.*

0101	Diba Alvi	Seats (Total: 15)
	TuTh 11:00am - 11:50am	PAC 3164

MUSC229A Ensemble; Orchestra

(Perm req)

Credits: 1

Grading Method: Regular

*Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.**Audition required before permission of department will be granted, contact instructor to make arrangements.*

0101	David Neely	Seats (Total: 70)
	TuTh 3:30pm - 6:30pm	PAC 1230 Lab

MUSC229D Ensemble; Wind Orchestra

(Perm req)

Credits: 1

Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Open by audition, contact instructor to make arrangements.

0101	Michael Votta	Seats (Total: 50)	
	TuTh 3:30pm - 6:30pm	PAC 2540	Lab

MUSC229E Ensemble; Wind Ensemble

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Open by audition, contact instructor to make arrangements.

0101	Andrea Brown	Seats (Total: 75)	
	MWF 11:00am - 12:30pm	PAC 2540	Lab

MUSC229F Ensemble; Marching Band

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Open by audition.

0101	Andrea Brown, Craig Potter	Seats (Total: 300)	
	MWF 3:00pm - 5:00pm	PAC 2540	Lab
FC01	Craig Potter	Seats (Total: 10)	
	MWF 3:00pm - 5:00pm	PAC 2540	Lab
<i>Restricted to students in Freshmen Connection.</i>			

MUSC229G Ensemble; Marching Band Repertoire

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Corequisite: MUSC 229F.

0101	Craig Potter, Andrea Brown	Seats (Total: 300)	
	Tu 7:00pm - 9:00pm	PAC 2540	Lab
FC01	Craig Potter	Seats (Total: 10)	
	Tu 7:00pm - 9:00pm	PAC 2540	Lab
<i>Restricted to students in Freshmen Connection.</i>			

MUSC229I Ensemble; Marching Band Auxiliary

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Corequisite: MUSC 229F.

0101	Craig Potter, Andrea Brown	Seats (Total: 50)	
	TuTh 6:30pm - 8:30pm	HBK 0115	Lab
FC01	Craig Potter	Seats (Total: 10)	
	TuTh 6:30pm - 8:30pm	HBK 0115	Lab
<i>Restricted to students in Freshmen Connection.</i>			

MUSC229J Ensemble; Jazz Ensemble

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	Timothy Powell	Seats (Total: 25)	
	MW 5:30pm - 7:15pm	PAC 1230	Lab

0201	Timothy Powell	Seats (Total: 30)	
	MW 1:00pm - 2:20pm	PAC 1230	Lab
0301	Timothy Powell	Seats (Total: 30)	
	M 7:30pm - 9:30pm	PAC 1230	Lab

MUSC229K Ensemble; Marching Band Dance Team

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Craig Potter, Ann Kennedy, Andrea Brown	Seats (Total: 30)	
	Su 7:00pm - 9:30pm	Location: TBA	Lab
	TuTh 6:30pm - 9:00pm	Location: TBA	Lab
FC01	Ann Kennedy, Andrea Brown, Craig Potter	Seats (Total: 10)	
	Su 7:00pm - 9:30pm	Location: TBA	Lab
	TuTh 6:30pm - 9:00pm	Location: TBA	Lab
<i>Restricted to students in Freshmen Connection.</i>			

MUSC229P Ensemble; Pep Band

(Perm req) Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Permission of Instructor.

0101	Andrea Brown	Seats (Total: 60)	
Contact instructor or department for details.			

MUSC229R Ensemble; Repertoire Orchestra

(Perm req) Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	Jesse Leong	Seats (Total: 50)	
	MW 3:00pm - 5:00pm	PAC 1230	Lab

MUSC229U Ensemble; University Band

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Open by audition, contact instructor to make arrangements.

0101	Craig Potter	Seats (Total: 100)	
	W 7:30pm - 9:30pm	PAC 2540	Lab

MUSC229Z Ensemble; Jazz Combo

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	Gerard Kunkel	Seats (Total: 10)	
	Contact instructor or department for details.		
0201	Thomas Baldwin	Seats (Total: 10)	
	Contact instructor or department for details.		
0301	Michael Kuhl	Seats (Total: 10)	
	Contact instructor or department for details.		
0401	Michael Quinlivan	Seats (Total: 10)	
	Contact instructor or department for details.		

MUSC250 Advanced Theory of Music I

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

Prerequisite: Minimum grade of C- in MUSC151.

A continuation of MUSC 151, with further study of chromatic and modulatory techniques of the nineteenth century. Emphasis on sight singing, ear training, analysis and compositional skills.

0101	Jared Kenlon	Seats (Total: 6)	
	TuTh 8:00am - 9:15am	PAC 3160	
	MW 8:00am - 8:50am	PAC 2164	Lab
0102	Jared Kenlon	Seats (Total: 6)	
	TuTh 8:00am - 9:15am	PAC 3160	
	MW 9:00am - 9:50am	PAC 2164	Lab
0201	Daniel Zimmerman	Seats (Total: 6)	
	TuTh 9:30am - 10:45am	PAC 3168	
	MW 9:00am - 9:50am	PAC 3164	Lab
0202	Daniel Zimmerman	Seats (Total: 6)	
	TuTh 9:30am - 10:45am	PAC 3168	
	MW 9:00am - 9:50am	PAC 3168	Lab
0301	Mark Wilson	Seats (Total: 6)	
	TuTh 9:30am - 10:45am	PAC 3164	
	MW 10:00am - 10:50am	PAC 3164	Lab
0302	Mark Wilson	Seats (Total: 6)	
	TuTh 9:30am - 10:45am	PAC 3164	
	MW 10:00am - 10:50am	PAC 3168	Lab
0401	Jared Kenlon	Seats (Total: 6)	
	TuTh 9:30am - 10:45am	PAC 3160	
	MW 8:00am - 8:50am	PAC 3160	Lab
0402	Jared Kenlon	Seats (Total: 6)	
	TuTh 9:30am - 10:45am	PAC 3160	
	MW 9:00am - 9:50am	PAC 3160	Lab

MUSC260

Music as Global Culture

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHU,
DVUP

Prerequisite: MUSC151. Restriction: Must be in a major within the ARHU-School of Music department. Credit only granted for: MUSC220 or MUSC260.

Explores how and why people create, transform, and move music around the globe. Taking a comparative approach to Western art musics and other musics of the world, course will examine a variety of musical practices in their social, political, and economic contexts. Experiential knowledge will be developed through hands-on ethnographic research.

0101	Siv Lie	Seats (Total: 25)		
	MW 2:00pm - 2:50pm	PAC 2201		
	F 1:00pm - 1:50pm	PAC 2160	Discussion	
0102	Siv Lie	Seats (Total: 25)		
	MW 2:00pm - 2:50pm	PAC 2201		
	F 2:00pm - 2:50pm	PAC 2160	Discussion	
0103	Siv Lie	Seats (Total: 25)		
	MW 2:00pm - 2:50pm	PAC 2201		
	F 3:00pm - 3:50pm	PAC 2160	Discussion	

MUSC269R Special Topics in Study Abroad II; From Elvis to Rap: 50 Years of History As Seen Through Rock Music

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

MUSC289I Exploring the Power of Musical Performance in Social Engagement

Credits: 3 Grading Method: Regular, CORE: HA, D General Education: DSHU,
Pass-Fail, Audit DVUP, SCIS

0101	Lee Hinkle	Seats (Total: 20)		
	MW 1:00pm - 1:50pm	PLS 1130		
	F 9:00am - 9:50am	ESJ B0320	Discussion	
0102	Lee Hinkle	Seats (Total: 20)		
	MW 1:00pm - 1:50pm	PLS 1130		
	F 10:00am - 10:50am	ESJ B0320	Discussion	

0103	Lee Hinkle	Seats (Total: 20)	
	MW 1:00pm - 1:50pm	PLS 1130	
	F 11:00am - 11:50am	ESJ B0320	Discussion

MUSC328 Introduction to Chamber Music for Pianists

(Perm req)

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

A course to introduce the piano major to chamber music at a moderately difficult level. Class instruction will center on actual rehearsal and coaching geared toward performance, and will be supplemented by further experience in applied instrumental studios.

0101	Instructor: TBA	Seats (Total: 10)	
	Contact instructor or department for details.		

MUSC329A Ensemble; University of Maryland Chorale

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Audition required before permission of department will be granted, contact instructor to make arrangements. Monthly evening rehearsals will be scheduled as announced.

0101	Matthew Goinz	Seats (Total: 75)	
	TuTh 4:30pm - 6:00pm	PAC 2201	Lab

MUSC329B Ensemble; Chamber Singers

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Audition required before permission of department will be granted, contact instructor to make arrangements. Monthly evening rehearsals will be scheduled as announced.

0101	Edward Maclary	Seats (Total: 50)	
	MW 3:00pm - 3:50pm	PAC 2201	Lab
	TuTh 3:30pm - 4:20pm	PAC 2201	Lab

MUSC329E Ensemble; Gospel Choir

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Anne Carswell	Seats (Total: 60)	
	Th 7:00pm - 10:00pm	PAC 2201	Lab

MUSC329M Ensemble; Men's Chorus

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Monthly evening rehearsals will be scheduled as announced.

0101	Timothy Keeler	Seats (Total: 40)	
	MWF 12:00pm - 12:50pm	PAC 1230	Lab
<i>Sharing with Craig Arnold's approval even though there are two different instructors.</i>			

MUSC329O Ensemble; Opera Chorus

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

0101	Edward Maclary	Seats (Total: 30)	
	F 3:30pm - 5:30pm	PAC 2170	Lab

MUSC329W Ensemble; Treble Choir

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small ensembles of instruments, piano, or small vocal groups. After two registrations in MUSC129, the student will elect MUSC229 for two additional semesters and MUSC329 thereafter.

Monthly evening rehearsals will be scheduled as announced.

0101	Kenneth Elpus	Seats (Total: 60)	
	MWF 12:00pm - 12:50pm	PAC 2201	Lab

MUSC330

Music History III

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MUSC320; and permission of ARHU-School of Music department.

A historical study of Western music from 1800 to present.

0101	Olga Haldey	Seats (Total: 15)	
	MW 2:00pm - 2:50pm	PAC 2200	
	F 1:00pm - 1:50pm	PAC 3160	Discussion
0102	Olga Haldey	Seats (Total: 15)	
	MW 2:00pm - 2:50pm	PAC 2200	
	F 2:00pm - 2:50pm	PAC 3160	Discussion
0103	Olga Haldey	Seats (Total: 15)	
	MW 2:00pm - 2:50pm	PAC 2200	
	F 3:00pm - 3:50pm	PAC 3160	Discussion

MUSC369M

Special Topics in Study Abroad III; Masterpieces of Italian Opera

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

MUSC379

Opera Workshop

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail

Open to music and non-music majors (by audition). Operatic production and performance, performance techniques and coaching, stage direction, set design, costume design and make-up. Repertory will include smaller operatic works, excerpts or scenes.

0101	Amanda Consol	Seats (Total: 15)	
	MW 4:00pm - 6:00pm	PAC 2170	Lab

MUSC386**Experiential Learning**

(Perm req)

Credits: 6 Grading Method: Regular,
Pass-Fail

Prerequisite: Permission of ARHU-School of Music department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

MUSC388**Music Internship**

(Perm req)

Credits: 3 Grading Method: Regular

Pre-professional field work in music.

0201	Michael Votta	Seats (Total: 5)
Contact instructor or department for details.		
0301	Edward Maclary	Seats (Total: 5)
Contact instructor or department for details.		

MUSC389**Music Internship Analysis**

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Documentation and evaluation of field work experience.

0101	Lori DeBoy	Seats (Total: 5)
Contact instructor or department for details.		
0201	Michael Hewitt	Seats (Total: 1)
Contact instructor or department for details.		

MUSC428**Repertoire Coaching of Vocal or Chamber Music**

(Perm req)

Credits: 2 Grading Method: Regular

A course for piano students who wish to go further than the work offered in MUSC128, MUSC228 and MUSC328 by becoming specialists in the areas of vocal coaching or chamber music coaching. Elements of pedagogy, conducting and responsible artistic decision-making for the entire musical production.

0101	Rita Sloan	Seats (Total: 5)
Contact instructor or department for details.		

MUSC438R**Area Studies in Ethnomusicology; Roma in Europe**

Credits: 3 Grading Method: Regular

Advanced study of musics in selected parts of the world.

Through the study of various Romani ("Gypsy") musics and their social contexts, this course aims to 1) develop critical listening and textual analysis skills, and 2) broaden students perspectives on issues facing ethnoracial minorities in Europe, framed through larger questions about identity, politics, and economics.

0101	Siv Lie	Seats (Total: 12)
	Tu 3:30pm - 6:00pm	PAC 3110A

MUSC443 Solo Vocal Literature

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MUSC330 and MUSC331; or students who have taken courses with comparable content may contact the department.

The study of solo vocal literature from the Baroque Cantata to the Art Song of the present. The Lied, Melodie, vocal chamber music and the orchestral song are examined.

0101	Diba Alvi	Seats (Total: 10)
	TuTh 9:30am - 10:45am	PAC 2201

MUSC444 Wind and Percussion Literature

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Permission of ARHU-School of Music department. Corequisite: MUSP420 or MUSP419.

Recital program notes and written projects in wind or percussion literature.

Contact department for information to register for this course.

MUSC446 String Literature

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MUSP316; and permission of ARHU-School of Music department.

Recital program notes and written projects in string literature.

Contact department for information to register for this course.

MUSC448 Selected Topics in Music

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

MUSC448A

Selected Topics in Music; Accompanying Practicum

(Perm req)

Credits: 1

Grading Method: Regular

0101	Mayron Tsong	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC448D

Selected Topics in Music; Music History Pedagogy

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

0101	Patrick Warfield	Seats (Total: 12)
	Th 3:30pm - 6:00pm	PAC 3110A

MUSC448F

Selected Topics in Music; Music and Film in Cross-Cultural Perspectives

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

0101	John Witzleben	Seats (Total: 12)
	W 3:30pm - 6:00pm	PAC 3110A

MUSC448M

Selected Topics in Music; History of Music Theory tgo 1700

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

0101	Barbara Haggh-Huglo	Seats (Total: 12)
	Tu 7:00pm - 9:30pm	PAC 3110A

MUSC448P

Selected Topics in Music; How to Win an Orchestral Audition

(Perm req)

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

0101	Robert DiLutis	Seats (Total: 15)
	M 3:00pm - 4:30pm	PAC 3168

MUSC448W

Selected Topics in Music; Instrumental Pedagogy

(Perm req)

Credits: 1

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSC450

Musical Form

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MUSC251.

A study of the principles of organization in music with emphasis on eighteenth and nineteenth century European music. Reading and analysis of scores exemplifying the musical forms.

0101	Daniel Zimmerman	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	PAC 2164

MUSC451

Analysis of Music

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MUSC450; or permission of instructor.

A course in the analysis of music. Discussion of individual works, with emphasis on their unique characteristics and on the relation of analysis to performance.

0101	Thomas DeLio	Seats (Total: 12)
	W 5:30pm - 8:00pm	PAC 2164

MUSC453

Jazz Improvisation I

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MUSC251; or students who have taken courses with comparable content may contact the department. And permission of ARHU-School of Music department. Credit only granted for: MUSC345 or MUSC453. Formerly: MUSC345.

Jazz theory, notational conventions, improvisation techniques, reading and analysis of music, and performance in small combo format.

0101	Michael Quinlivan	Seats (Total: 8)
	M 7:30pm - 9:30pm	PAC 1208
	Contact instructor or department for details.	

MUSC455**Theory of Jazz**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MUSC250; or permission of ARHU-School of Music department. Restriction: Must be in a major within ARHU-School of Music department.

Analysis of jazz harmony, with emphasis on principles of substitution, reharmonization, and syntax. Topics may also include chord/scale relationships, phrasing and articulation, notation, and introductory arranging concepts such as orchestration and form.

0101	Timothy Powell	Seats (Total: 12)
	TuTh 3:30pm - 4:45pm	PAC 3168

MUSC469C**Orchestral Excerpts for String Players; Violin**

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

Restriction: permission of department.

0101	David Salness	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC469D**Orchestral Excerpts for String Players; Viola**

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

Restriction: permission of department.

0101	Katherine Murdock	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC469F**Orchestral Excerpts for String Players; Bass**

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

0101	Robert Oppelt	Seats (Total: 15)
	W 4:30pm - 5:45pm	Location: TBA

MUSC469V Orchestral Excerpts for String Players; Harp

(Perm req)

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

0101	Sarah Fuller	Seats (Total: 10)
Contact instructor or department for details.		

MUSC490 Conducting

(Perm req)

Credits: 2

Grading Method: Regular

Prerequisite: MUSC251.

Vocal and instrumental baton techniques.

0101	Jonathan King	Seats (Total: 13)
	MWF 11:00am - 11:50am	PAC 2201
0201	Edward Maclary	Seats (Total: 13)
	MWF 1:00pm - 1:50pm	PAC 2201

MUSC492 Keyboard Music I

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Permission of ARHU-School of Music department.

The history and literature of harpsichord and solo piano music from its beginning to the romantic period. Emphasis is placed on those segments of repertory which are encountered in performance and teaching situations at the present time.

0101	Bradford Gowen	Seats (Total: 13)
	MW 11:00am - 12:15pm	PAC 2160

MUSC499 Independent Studies

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Independent research on a topic chosen in consultation with the instructor, which may culminate in a paper or appropriate project.

Contact department for information to register for this course.

MUSC550**Theory of Music Graduate Review**

(Perm req)

Credits: 3

Grading Method: Regular,
Audit*Restriction: Permission of ARHU-School of Music department.**Music theory review for graduate students: aural training, counterpoint, basic diatonic harmony, chromatic harmony, and analysis of complete works.*

0101	Robert Gibson	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	PAC 2160

MUSC601**Advanced English Lyric Diction**

(Perm req)

Credits: 1

Grading Method: Regular,
Audit*Restriction: Must be in one of the following programs (Music - Doctoral (Doctoral); Music - Master (Master's)) . And permission of instructor; or admission to graduate voice program.**Concepts, strategies and techniques for singing operatic, oratorio and song literature in English: stress patterns, linkage, stressed and non stressed vowels, diphthongs, placement of consonants and vowels, and communication of text with emphasis on current performance practices. Use of the International Phonetic Alphabet (IPA) will be stressed.*

0101	Jennifer Cabot	Seats (Total: 15)
	Tu 10:30am - 12:00pm	PAC 2170

MUSC604**Advanced French Lyric Diction**

(Perm req)

Credits: 1

Grading Method: Regular,
Audit*Restriction: Must be in one of the following programs (Music - Doctoral (Doctoral); Music - Master (Master's)) . And permission of instructor; or admission to graduate voice program.**Concepts, strategies and techniques for singing operatic and song literature in French: phoneticization, formation and singing of the vowel-sounds, semi-consonants, and consonants; the liaison; legato singing in French; the hiatus, mute and aspirate 'h'; stress and word rhythm. Use of the International Phonetic Alphabet (IPA) will be stressed.*

0101	Gran Wilson	Seats (Total: 15)
	Tu 10:30am - 12:00pm	PAC 1218

MUSC605**Opera Repertory I**

(Perm req)

Credits: 1 Grading Method: Regular

Prerequisite: MUSC602; or permission of instructor. Restriction: Must be in one of the following programs (Music - Doctoral (Doctoral); Music - Master (Master's)).

Advanced vocal coaching of selections from the Italian, French, German, and English opera repertory: musical accuracy; language facility; diction clarity; and dramatic interpretation.

0101	Craig Kier	Seats (Total: 10)
	Th 10:30am - 12:00pm	PAC 2160

MUSC608**Chamber Music Repertory; Chamber Music Repertoire**

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

Prerequisite: graduate standing as a major in performance. A study, through performance, of diversified chamber music for standard media.

Contact department for information to register for this course.

MUSC609**Piano Chamber Music Practicum and Analysis**

(Perm req)

Credits: 2 Grading Method: Regular

Study of repertoire written for piano in duos or with several instruments, to develop an accompanists advanced performance skills in listening, balance, nuance in dynamics, harmonic motion and phrasing.

0101	Rita Sloan	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC611**Opera Techniques I**

(Perm req)

Credits: 2 Grading Method: Regular,
Audit

Corequisite: MUSC601. Restriction: Permission of director of opera; and must be in one of the following programs (Music - Doctoral (Doctoral); Music - Master (Master's)).

Techniques for opera performance: Improvisation; Acting I, Scene Study I; and Movement I. Practical application of styles and techniques to operatic repertoire.

0101	Craig Kier	Seats (Total: 10)
	TBA	PAC 2170
	TBA	PAC 1218 Lab

MUSC613**Opera Techniques III**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit*Prerequisite: Minimum grade of B- in MUSC612; and permission of Director of Opera required.**Corequisite: MUSC603 and MUSC605. Restriction: Must be in one of the following programs (Music - Doctoral (Doctoral); Music - Master (Master's)).**Continuation of MUSC 612. Techniques for opera performance: Scene Study III; Movement III; and Shakespeare.*

0101	Craig Kier	Seats (Total: 10)	
	TBA	PAC 2170	
	TBA	PAC 1218	Lab

MUSC629A**Ensemble; Orchestra**

(Perm req)

Credits: 1

Grading Method: Regular

*Rehearsal and performance of selected works for small and large instrumental ensembles.**Audition required before permission of department will be granted, contact instructor to make arrangements.*

0101	David Neely	Seats (Total: 50)	
	TuTh 3:30pm - 6:30pm	PAC 1230	Lab

MUSC629C**Ensemble; Wind Ensemble**

(Perm req)

Credits: 1

Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Michael Votta	Seats (Total: 20)	
	MWF 11:00am - 12:30pm	PAC 2540	Lab

MUSC629F**Ensemble; Marching Band**

Credits: 1

Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Andrea Brown	Seats (Total: 175)	
	MWF 3:00pm - 5:00pm	PAC 2540	Lab

MUSC629G Ensemble; Balinese Gamelan

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	I Suadin	Seats (Total: 5)		
	Th 7:00pm - 8:30pm	PAC 1230	Lab	

MUSC629H Ensemble; Harp

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Sarah Fuller	Seats (Total: 1)		
	TuTh 11:00am - 12:15pm	Location: TBA	Lab	

MUSC629J Ensemble; Jazz Ensemble

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	Timothy Powell	Seats (Total: 20)		
	MW 5:30pm - 7:15pm	PAC 1230	Lab	
0201	Timothy Powell	Seats (Total: 10)		
	MW 1:00pm - 2:20pm	PAC 1230	Lab	
0301	Timothy Powell	Seats (Total: 10)		
	M 7:30pm - 9:30pm	PAC 1230	Lab	

MUSC629K Ensemble; Japanese Koto

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Kyoko Okamoto	Seats (Total: 2)		
	Tu 5:30pm - 7:00pm	PAC 3160	Lab	

MUSC629L Ensemble; Advanced Japanese Koto

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Kyoko Okamoto	Seats (Total: 4)	
	Tu 7:00pm - 8:30pm	PAC 3160	Lab

MUSC629O Ensemble; Tuba & Euphonium

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Craig Potter	Seats (Total: 5)	
	Contact instructor or department for details.		

MUSC629P Ensemble; Percussion Ensemble

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Lee Hinkle	Seats (Total: 5)	
	M 5:00pm - 7:30pm	PAC 2540	Lab
	W 5:15pm - 7:15pm	PAC 2540	Lab
0201	Lee Hinkle	Seats (Total: 5)	
	Contact instructor or department for details.		

MUSC629Q Ensemble; Korean Percussion Ensemble

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

0101	Sebastian Wang	Seats (Total: 5)	
	Th 7:00pm - 8:30pm	PAC 2170	

MUSC629R Ensemble; Repertoire Orchestra

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	Jesse Leong	Seats (Total: 10)	
	MW 3:00pm - 5:00pm	PAC 1230	Lab

MUSC629U Ensemble; University Band

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Open by audition, contact instructor to make arrangements.

0101	Craig Potter	Seats (Total: 10)	
	W 7:30pm - 9:30pm	PAC 2540	Lab

MUSC629W Ensemble; Wind Orchestra

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Open by audition, contact instructor to make arrangements.

0101	Michael Votta	Seats (Total: 30)	
	TuTh 3:30pm - 6:30pm	PAC 2540	Lab

MUSC629Z Ensemble; Jazz Combo

(Perm req)

Credits: 1 Grading Method: Regular

Rehearsal and performance of selected works for small and large instrumental ensembles.

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	Gerard Kunkel	Seats (Total: 10)	
	Contact instructor or department for details.		
0201	Thomas Baldwin	Seats (Total: 10)	
	Contact instructor or department for details.		

0301	Michael Kuhl	Seats (Total: 10)
	Contact instructor or department for details.	
0401	Michael Quinlivan	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC646

Introduction to Musicology

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Graduate student standing in in the School of Music. Credit only granted for: MUSC648 or MUSC646.

An introduction to the basics of musicological research, including sources, methodologies, and techniques, as well as the fundamentals of both academic and non-academic writing.

0101	Olga Haldey	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	PAC 3110A

MUSC648

Seminar in Music Research; Seminar in Music Research

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

An introduction to graduate study in the history and literature of music. Bibliography and methodology of systematic and historical musicology.

0101	Paul Covey	Seats (Total: 15)
	Tu 7:00pm - 9:30pm	PAC 2515C
0201	Paul Covey	Seats (Total: 15)
	M 7:00pm - 9:30pm	PAC 2515C
0301	Nicole Powlison	Seats (Total: 15)
	TuTh 9:30am - 10:45am	PAC 2515C
0401	Paul Covey	Seats (Total: 15)
	Th 7:00pm - 9:30pm	PAC 2515C

MUSC649A

Ensemble; University of Maryland Chorale

(Perm req)

Credits: 1 Grading Method: Regular

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	Jonathan King, Minji Kim	Seats (Total: 10)	
	TuTh 4:30pm - 6:00pm	PAC 2201	Lab

MUSC649B Ensemble; Chamber Singers

(Perm req)

Credits: 1 Grading Method: Regular

Audition required before permission of department will be granted, contact instructor to make arrangements.

0101	Edward Maclary	Seats (Total: 10)	
	MW 3:00pm - 3:50pm	PAC 2201	Lab
	TuTh 3:30pm - 4:20pm	PAC 2201	Lab

MUSC649E Ensemble; Ensemble: Gospel Choir

Credits: 1 Grading Method: Regular

0101	Anne Carswell	Seats (Total: 10)	
	Th 7:00pm - 10:00pm	PAC 2201	Lab

MUSC649M Ensemble; Men's Chorus

Credits: 1 Grading Method: Regular

0101	Timothy Keeler	Seats (Total: 10)	
	MWF 12:00pm - 12:50pm	PAC 1230	Lab

MUSC649O Ensemble; Opera Chorus

(Perm req)

Credits: 1 Grading Method: Regular

0101	Edward Maclary	Seats (Total: 15)	
	F 3:30pm - 5:30pm	PAC 2170	Lab

MUSC649W Ensemble; Treble Choir

Credits: 1 Grading Method: Regular

0101	Kenneth Elpus	Seats (Total: 10)
	MWF 12:00pm - 12:50pm	PAC 2201 Lab

MUSC651 The Theories of Heinrich Schenker

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: MUSC450; or permission of ARHU-School of Music department.

The analytical methods of Heinrich Schenker with application of those theories to musical literature from the Baroque, Classical and Romantic periods.

0101	Thomas DeLio	Seats (Total: 10)
	W 2:00pm - 4:30pm	PAC 2164

MUSC653 Jazz Improvisation I

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of ARHU-School of Music department. Credit only granted for: MUSC653 or MUSC699Z. Formerly: MUSC699Z.

Study of improvisational techniques and historical styles of jazz, including study of jazz "language" through transcription and analysis of recorded solos, and the exploration of creative processes and philosophical concepts.

0101	Michael Quinlivan	Seats (Total: 8)
	M 7:30pm - 9:30pm	PAC 1208
	Contact instructor or department for details.	

MUSC655 Theory of Jazz

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of ARHU-School of Music department. Credit only granted for: MUSC655 or MUSC699J. Formerly: MUSC699J.

Analysis of jazz harmony, with emphasis on principles of substitution, reharmonization, and syntax. Topics may also include chord/scale relationships, phrasing, articulation, notation and orchestration.

0101	Timothy Powell	Seats (Total: 12)
	TuTh 3:30pm - 4:45pm	PAC 3168

MUSC659A Seminar in Repertoire and Pedagogy

(Perm req)

Credits: 2-3 Grading Method: Regular

Analysis and preparation of choral master works from all major style periods for the purpose of successful rehearsal and performance by conductors.

0101	Edward Maclary	Seats (Total: 6)
	MW 10:00am - 10:50am	PAC 3160

MUSC659B Seminar in Repertoire and Pedagogy; Orchestral Repertoire and Pedagogy

(Perm req)

Credits: 2-3 Grading Method: Regular

Analysis and preparation of choral master works from all major style periods for the purpose of successful rehearsal and performance by conductors.

0101	David Neely	Seats (Total: 6)
	Contact instructor or department for details.	

MUSC659C Seminar in Repertoire and Pedagogy; Wind Repertoire and Pedagogy

(Perm req)

Credits: 2-3 Grading Method: Regular,
Audit

Analysis and preparation of choral master works from all major style periods for the purpose of successful rehearsal and performance by conductors.

0101	Michael Votta	Seats (Total: 5)
	Contact instructor or department for details.	

MUSC669C Orchestral Excerpts for String Players; ViolinCredits: 1 Grading Method: Regular,
Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

0101	David Salness	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC669D Orchestral Excerpts for String Players; Viola

(Perm req)

Credits: 1 Grading Method: Regular,
Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

0101	Katherine Murdock	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC669F Orchestral Excerpts for String Players; Bass

(Perm req)

Credits: 1 Grading Method: Regular,
 Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

0101	Robert Oppelt	Seats (Total: 15)
	W 4:30pm - 5:45pm	Location: TBA

MUSC669V Orchestral Excerpts for String Players; Harp

(Perm req)

Credits: 1 Grading Method: Regular,
 Audit

In-depth study of the orchestral excerpts required for professional orchestra auditions.

0101	Sarah Fuller	Seats (Total: 5)
	Contact instructor or department for details.	

MUSC670 Advanced Analytical Techniques I

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: MUSC451; or permission of ARHU-School of Music department.

Analysis of representative masterpieces of the eighteenth and early nineteenth centuries.

0101	David Froom	Seats (Total: 15)
	M 12:00pm - 2:30pm	PAC 3110A

MUSC677 Current Theory and Method in Ethnomusicology

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARHU-School of Music department. Credit only granted for: MUET676 OR MUSC677. Formerly: MUET676.

Reading and discussion of major works in ethnomusicology, with emphasis on a close examination of trends in methodology and theory from approximately twenty years before the present to current work in both areas. Current work in all geographic areas will be reviewed and analyzed.

0101	John Witzleben	Seats (Total: 12)
	TuTh 2:00pm - 3:15pm	PAC 3110A

MUSC679F Seminar in Ethnomusicology; Music and Film in Cross-Cultural Perspectives

(Perm req)

Credits: 3 Grading Method: Regular

Seminar topics address current issues, including gender, the social economy of music, ethnography of performance, etc.

0101	John Witzleben	Seats (Total: 12)
	W 3:30pm - 6:00pm	PAC 3110A

MUSC679M Seminar in Ethnomusicology; Music and Social Movements

(Perm req)

Credits: 3 Grading Method: Regular

Seminar topics address current issues, including gender, the social economy of music, ethnography of performance, etc.

0101	Fernando Rios	Seats (Total: 12)
	M 3:30pm - 6:00pm	PAC 3110A

MUSC689 Advanced Conducting

(Perm req)

Credits: 2 Grading Method: Regular,
Audit

A concentrated study of the conducting techniques involved in the repertoire of all historical periods.

0101	David Neely	Seats (Total: 5)
	M 1:00pm - 3:30pm	PAC 2531

MUSC699 Selected Topics in Music

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSC699D Selected Topics in Music; Diction for Pianist

Credits: 1-3 Grading Method: Regular,
Audit

0101	Robert McReynolds	Seats (Total: 8)
	Contact instructor or department for details.	

MUSC699F Selected Topics in Music; Musical Movement and Analysis

Credits: 1-3 Grading Method: Regular,
Audit

0101	Dora Hanninen	Seats (Total: 10)
	F 1:00pm - 3:30pm	PAC 2170

MUSC699K Selected Topics in Music; Music in the Early Modern City

Credits: 1-3 Grading Method: Regular,
Audit

0101	Barbara Haggh-Huglo	Seats (Total: 12)
	TuTh 9:30am - 10:45am	PAC 3110A

MUSC699N Selected Topics in Music; Historical Performance Practice

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

0101	Richard King	Seats (Total: 12)
	M 3:30pm - 6:00pm	PAC 2168

MUSC699W Selected Topics in Music; Instrumental Pedagogy

Credits: 3 Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSC757 Aural Skills for Conductors

(Perm req)

Credits: 1 Grading Method: Regular

Restriction: Permission of ARHU-School of Music department.

Advanced musicianship skills necessary for conductors.

0101	Michael Votta	Seats (Total: 5)
	Tu 12:30pm - 1:30pm	PAC 2126
	W 1:00pm - 1:50pm	PAC 2126

MUSC758 Advanced Aural Skills for Conductors

(Perm req)

Credits: 1 Grading Method: Regular,
 Audit

Continuation of MUSC757, advanced aural skills necessary for conductors.

0101	Michael Votta	Seats (Total: 5)
	W 1:00pm - 2:15pm	PAC 2126

MUSC799 Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

MUSC800P Advanced Seminar in Music Pedagogy

(Perm req)

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: MUSC400; or students who have taken courses with comparable content may contact the department. Restriction: Permission of instructor.

A detailed study of historical and contemporary methods of pedagogy, and analysis of pedagogical problems. Sectioning by instrument. Required of all candidates for the D.M.A. Degree in performance and literature.

0101	Bradford Gowen	Seats (Total: 15)
	Th 2:30pm - 5:00pm	PAC 3160

MUSC800V Advanced Seminar in Music Pedagogy

(Perm req)

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: MUSC400; or students who have taken courses with comparable content may contact the department. Restriction: Permission of instructor.

A detailed study of historical and contemporary methods of pedagogy, and analysis of pedagogical problems. Sectioning by instrument. Required of all candidates for the D.M.A. Degree in performance and literature.

0101	Martha Randall	Seats (Total: 15)
	W 3:00pm - 5:30pm	PAC 3164 Lab

MUSC800W Advanced Seminar in Music Pedagogy

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: MUSC400; or students who have taken courses with comparable content may contact the department. Restriction: Permission of instructor.

A detailed study of historical and contemporary methods of pedagogy, and analysis of pedagogical problems. Sectioning by instrument. Required of all candidates for the D.M.A. Degree in performance and literature.

0101	Sarah Frisof	Seats (Total: 10)
	Contact instructor or department for details.	
0201	Mark Hill	Seats (Total: 10)
	Contact instructor or department for details.	
0301	Robert DiLutis	Seats (Total: 10)
	Contact instructor or department for details.	
0401	Erich Heckscher	Seats (Total: 10)
	Contact instructor or department for details.	
0501	Timothy Powell	Seats (Total: 10)
	Contact instructor or department for details.	
0601	Gregory Miller	Seats (Total: 10)
	Contact instructor or department for details.	
0701	Paul Gekker	Seats (Total: 10)
	Contact instructor or department for details.	
0801	Matthew Guilford	Seats (Total: 10)
	Contact instructor or department for details.	
0901	David Fedderly	Seats (Total: 10)
	Contact instructor or department for details.	
1001	Paul Kellner	Seats (Total: 10)
	Contact instructor or department for details.	
1101	Lee Hinkle	Seats (Total: 10)
	Contact instructor or department for details.	

MUSC802A Advanced Seminar in Music Pedagogy III

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: MUSC801. Restriction: Permission of ARHU-School of Music department.

A detailed study of historical and contemporary methods of pedagogy, and analysis of pedagogical problems. Sectioning by instrument.

0101	Robert McReynolds	Seats (Total: 5)	
	Contact instructor or department for details.		

MUSC811

Doctoral Opera Techniques

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Restriction: Permission of ARHU-School of Music department. Credit only granted for: MUSC611 or MUSC811.

Techniques for opera performance: Improvisation; Acting I, Scene Study I; and Movement I. Practical application of styles, techniques to operate repertoire, and methodology seminar.

0101	Craig Kier	Seats (Total: 5)	
	TBA	PAC 2170	
	TBA	PAC 1218	Lab

MUSC813

Doctoral Opera Techniques III

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: MUSC812; and permission of ARHU-School of Music department. Credit only granted for: MUSC613 and MUSC813.

Continuation of MUSC812. Techniques for opera performance: Scene Study III; Movement III; Acting III Shakespeare; Dance I; Stage Combat II; Stage Combat II; and methodology seminar.

0101	Craig Kier	Seats (Total: 5)	
	TBA	PAC 2170	
	TBA	PAC 1218	Lab

MUSC830S

Doctoral Seminar in Music Literature

Credits: 3

Grading Method: Regular,
Audit

Prerequisite: Must have completed at least twelve hours in music history and literature.

An analytical survey of the literature of music: keyboard music; vocal music; string music; wind instrument music; required of all candidates for the D.M.A. Degree in literature-performance.

0101	Kenneth Slowik	Seats (Total: 15)
	M 9:00am - 12:00pm	PAC 2126

MUSC830W Doctoral Seminar in Music Literature

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed at least twelve hours in music history and literature.

An analytical survey of the literature of music: keyboard music; vocal music; string music; wind instrument music; required of all candidates for the D.M.A. Degree in literature-performance.

0101	Sarah Frisof	Seats (Total: 10)
	Contact instructor or department for details.	
0201	Mark Hill	Seats (Total: 10)
	Contact instructor or department for details.	
0301	Robert DiLutis	Seats (Total: 10)
	Contact instructor or department for details.	
0401	Erich Heckscher	Seats (Total: 10)
	Contact instructor or department for details.	
0501	Timothy Powell	Seats (Total: 10)
	Contact instructor or department for details.	
0601	Gregory Miller	Seats (Total: 10)
	Contact instructor or department for details.	
0701	Paul Gekker	Seats (Total: 10)
	Contact instructor or department for details.	
0801	Matthew Guilford	Seats (Total: 10)
	Contact instructor or department for details.	
0901	David Fedderly	Seats (Total: 10)
	Contact instructor or department for details.	
1001	Paul Kellner	Seats (Total: 10)
	Contact instructor or department for details.	

1101	Lee Hinkle	Seats (Total: 10)
Contact instructor or department for details.		

MUSC832A Doctoral Seminar in Music Literature

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: MUSC831. Restriction: Permission of ARHU-School of Music department.

An analytical survey of the literature of music: keyboard music; vocal music; string music; wind instrument music.

0101	Rita Sloan	Seats (Total: 5)
Contact instructor or department for details.		

MUSC898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular
Contact department for information to register for this course.

MUSC899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular
Contact department for information to register for this course.

MUSP Music Performance Fall 2019

MUSP102A Music Performance; Piano

(Perm req)

Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP102B Music Performance; Voice

(Perm req)

Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP102C Music Performance; Violin

(Perm req)

Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP102D **Music Performance; Viola**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP102E **Music Performance; Cello**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP102F **Music Performance; Bass**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP102G **Music Performance; Flute**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP102H **Music Performance; Oboe**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP102I **Music Performance; Clarinet**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP102J **Music Performance; Bassoon**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP102K **Music Performance; Saxophone**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP102L **Music Performance; Horn**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP102M	Music Performance; Trumpet
(Perm req)	Credits: 2 Grading Method: Regular Contact department for information to register for this course.
MUSP102N	Music Performance; Trombone
(Perm req)	Credits: 2 Grading Method: Regular Contact department for information to register for this course.
MUSP102O	Music Performance; Tuba
(Perm req)	Credits: 2 Grading Method: Regular Contact department for information to register for this course.
MUSP102P	Music Performance; Euphonium
(Perm req)	Credits: 2 Grading Method: Regular Contact department for information to register for this course.
MUSP102Q	Music Performance; Percussion
(Perm req)	Credits: 2 Grading Method: Regular Contact department for information to register for this course.
MUSP102S	Music Performance; Guitar
(Perm req)	Credits: 2 Grading Method: Regular Contact department for information to register for this course.
MUSP102T	Music Performance; Composition
(Perm req)	Credits: 2 Grading Method: Regular, Audit Contact department for information to register for this course.
MUSP103A	Music Performance; Piano
(Perm req)	Credits: 2 Grading Method: Regular Contact department for information to register for this course.
MUSP103B	Music Performance; Voice

(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP103C Music Performance; Violin
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP103D Music Performance; Viola
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP103E Music Performance; Cello
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP103F Music Performance; Bass
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP103G Music Performance; Flute
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP103H Music Performance; Oboe
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP103I Music Performance; Clarinet
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP103J Music Performance; Bassoon
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP103K **Music Performance; Saxophone**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP103L **Music Performance; Horn**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP103M **Music Performance; Trumpet**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP103N **Music Performance; Trombone**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP103O **Music Performance; Tuba**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP103P **Music Performance; Euphonium**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP103Q **Music Performance; Percussion**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP103S **Music Performance; Guitar**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP103T **Music Performance; Instrument Composition**
(Perm req) Credits: 2 Grading Method: Regular,
Audit

0201

Thomas DeLio

Seats (Total: 5)

Contact instructor or department for details.

MUSP109A

Music Performance; Piano

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP109B

Music Performance; Voice

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP109C

Music Performance; Violin

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP109D

Music Performance; Viola

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP109E

Music Performance; Cello

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP109F

Music Performance; Bass

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP109G

Music Performance; Flute

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP109H

Music Performance; Oboe

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

Contact department for information to register for this course.

MUSP109S

Music Performance; Guitar

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP109V

Music Performance; Harp

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP110A

Music Performance; Piano

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP110B

Music Performance; Voice

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP110C

Music Performance; Violin

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP110D

Music Performance; Viola

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP110E

Music Performance; Cello

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP110F

Music Performance; Bass

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP110G

Music Performance; Flute

(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP110H Music Performance; Oboe
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP110I Music Performance; Clarinet
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP110J Music Performance; Bassoon
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP110K Music Performance; Saxophone
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP110L Music Performance; Horn
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP110M Music Performance; Trumpet
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP110N Music Performance; Trombone
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP110O Music Performance; Tuba
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP110P **Music Performance; Euphonium**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP110Q **Music Performance; Percussion**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP110S **Music Performance; Guitar**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP110V **Music Performance; Harp**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP119A **Music Performance; Piano**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP119B **Music Performance; Voice**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP119C **Music Performance; Violin**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP119D **Music Performance; Viola**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP119E **Music Performance; Cello**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP119F	Music Performance; Bass
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP119G	Music Performance; Flute
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP119H	Music Performance; Oboe
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP119I	Music Performance; Clarinet
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP119J	Music Performance; Bassoon
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP119K	Music Performance; Saxophone
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP119L	Music Performance; Horn
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP119M	Music Performance; Trumpet
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP119N	Music Performance; Trombone
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(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP119O Music Performance; Tuba
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP119P Music Performance; Euphonium
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP119Q Music Performance; Percussion
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP119S Music Performance; Guitar
(Perm req) Credits: 2-4 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP119T Music Performance; Composition
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP119V Music Performance; Harp
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP119W Music Performance; Electronic Composition
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP120A Music Performance; Piano
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

Contact department for information to register for this course.

MUSP120K

Music Performance; Saxophone

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP120L

Music Performance; Horn

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP120M

Music Performance; Trumpet

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP120N

Music Performance; Trombone

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP120O

Music Performance; Tuba

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP120P

Music Performance; Euphonium

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP120Q

Music Performance; Percussion

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP120T

Music Performance; Composition

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP120V

Music Performance; Harp

(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP120W Music Performance; Electronic Composition
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP202A Music Performance; Piano
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP202B Music Performance; Voice
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP202C Music Performance; Violin
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP202D Music Performance; Viola
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP202E Music Performance; Cello
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP202F Music Performance; Bass
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP202G Music Performance; Flute
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP202H **Music Performance; Oboe**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP202I **Music Performance; Clarinet**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP202J **Music Performance; Bassoon**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP202K **Music Performance; Saxophone**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP202L **Music Performance; Horn**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP202M **Music Performance; Trumpet**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP202N **Music Performance; Trombone**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP202O **Music Performance; Tuba**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP202P **Music Performance; Euphonium**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP202Q	Music Performance; Percussion
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP202S	Music Performance; Guitar
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP203A	Music Performance; Piano
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP203B	Music Performance; Voice
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP203C	Music Performance; Violin
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP203D	Music Performance; Viola
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP203E	Music Performance; Cello
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP203F	Music Performance; Bass
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP203G	Music Performance; Flute
-----------------	---------------------------------

(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP203H Music Performance; Oboe
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP203I Music Performance; Clarinet
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP203J Music Performance; Bassoon
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP203K Music Performance; Saxophone
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP203L Music Performance; Horn
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP203M Music Performance; Trumpet
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP203N Music Performance; Trombone
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP203O Music Performance; Tuba
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP203P	Music Performance; Euphonium
(Perm req)	Credits: 2 Grading Method: Regular Contact department for information to register for this course.
MUSP203Q	Music Performance; Percussion
(Perm req)	Credits: 2 Grading Method: Regular Contact department for information to register for this course.
MUSP203S	Music Performance; Guitar
(Perm req)	Credits: 2 Grading Method: Regular Contact department for information to register for this course.
MUSP203V	Music Performance
(Perm req)	Credits: 2 Grading Method: Regular, Audit Contact department for information to register for this course.
MUSP207A	Music Performance; Piano
(Perm req)	Credits: 2 Grading Method: Regular Contact department for information to register for this course.
MUSP207B	Music Performance; Voice
(Perm req)	Credits: 2 Grading Method: Regular Contact department for information to register for this course.
MUSP207C	Music Performance; Violin
(Perm req)	Credits: 2 Grading Method: Regular Contact department for information to register for this course.
MUSP207D	Music Performance; Viola
(Perm req)	Credits: 2 Grading Method: Regular Contact department for information to register for this course.
MUSP207E	Music Performance; Cello
(Perm req)	Credits: 2 Grading Method: Regular

Contact department for information to register for this course.

MUSP207F

Music Performance; Bass

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP207G

Music Performance; Flute

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP207H

Music Performance; Oboe

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP207I

Music Performance; Clarinet

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP207J

Music Performance; Bassoon

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP207K

Music Performance; Saxophone

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP207L

Music Performance; Horn

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP207M

Music Performance; Trumpet

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP207N

Music Performance; Trombone

(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP207O Music Performance; Tuba
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP207P Music Performance; Euphonium
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP207Q Music Performance; Percussion
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP207S Music Performance; Guitar
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP207V Music Performance; Harp
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP208A Music Performance; Piano
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP208B Music Performance; Voice
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP208C Music Performance; Music Performanc: Violin
Credits: 2-4 Grading Method: Regular,
Audit
Contact department for information to register for this course.

Contact department for information to register for this course.

MUSP208M

Music Performance; Trumpet

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP208N

Music Performance; Trombone

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP208O

Music Performance; Tuba

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP208P

Music Performance; Euphonium

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP208Q

Music Performance; Percussion

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP208S

Music Performance; Guitar

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP208V

Music Performance; Harp

(Perm req)

Credits: 2-4

Grading Method: Regular

Contact department for information to register for this course.

MUSP217A

Music Performance; Piano

(Perm req)

Credits: 2

Grading Method: Regular

Contact department for information to register for this course.

MUSP217B

Music Performance; Voice

(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP217C Music Performance; Violin
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP217D Music Performance; Viola
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP217E Music Performance; Cello
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP217F Music Performance; Bass
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP217G Music Performance; Flute
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP217H Music Performance; Oboe
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP217I Music Performance; Clarinet
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP217J Music Performance; Bassoon
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP217K **Music Performance; Saxophone**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP217L **Music Performance; Horn**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP217M **Music Performance; Trumpet**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP217N **Music Performance; Trombone**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP217O **Music Performance; Tuba**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP217P **Music Performance; Euphonium**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP217Q **Music Performance; Percussion**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP217S **Music Performance; Guitar**
(Perm req) Credits: 2-4 Grading Method: Regular
Contact department for information to register for this course.

MUSP217T **Music Performance; Composition**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP217V	Music Performance; Harp
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP217W	Music Performance; Electronic Composition
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP218A	Music Performance; Piano
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP218B	Music Performance; Voice
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP218C	Music Performance; Violin
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP218D	Music Performance; Viola
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP218E	Music Performance; Cello
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP218F	Music Performance; Bass
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP218G	Music Performance; Flute
-----------------	---------------------------------

(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP218H Music Performance; Oboe
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP218I Music Performance; Clarinet
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP218J Music Performance; Bassoon
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP218K Music Performance; Saxophone
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP218L Music Performance; Horn
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP218M Music Performance; Trumpet
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP218N Music Performance; Trombone
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP218O Music Performance; Tuba
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP218P **Music Performance; Euphonium**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP218Q **Music Performance; Percussion**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP218T **Music Performance; Composition**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP218V **Music Performance; Harp**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP218W **Music Performance; Electronic Composition**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP302A **Music Performance; Piano**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP302B **Music Performance; Voice**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP302C **Music Performance; Violin**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP302D **Music Performance; Viola**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP302E	Music Performance; Cello
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP302F	Music Performance; Bass
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP302G	Music Performance; Flute
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP302H	Music Performance; Oboe
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP302I	Music Performance; Clarinet
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP302J	Music Performance; Bassoon
(Perm req)	Credits: 2 Grading Method: Regular, Audit
	Contact department for information to register for this course.

MUSP302K	Music Performance; Saxophone
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP302L	Music Performance; Horn
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP302M	Music Performance; Trumpet
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(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP302N Music Performance; Trombone
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP302O Music Performance; Tuba
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP302P Music Performance; Euphonium
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP302Q Music Performance; Percussion
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP302S Music Performance; Guitar
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP302V Music Performance; Harp
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP303A Music Performance; Piano
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP303B Music Performance; Voice
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP303C **Music Performance; Violin**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP303D **Music Performance; Viola**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP303E **Music Performance; Cello**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP303F **Music Performance; Bass**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP303G **Music Performance; Flute**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP303H **Music Performance; Oboe**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP303I **Music Performance; Clarinet**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP303J **Music Performance; Bassoon**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP303K **Music Performance; Saxophone**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP303L	Music Performance; Horn
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP303M	Music Performance; Trumpet
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP303N	Music Performance; Trombone
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP303O	Music Performance; Tuba
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP303P	Music Performance; Euphonium
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP303Q	Music Performance; Percussion
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP303S	Music Performance; Guitar
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP303V	Music Performance; Harp
(Perm req)	Credits: 2 Grading Method: Regular, Audit
	Contact department for information to register for this course.

MUSP305A	Music Performance; Piano
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(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP305B Music Performance; Voice
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP305C Music Performance; Violin
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP305D Music Performance; Viola
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP305E Music Performance; Cello
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP305F Music Performance; Bass
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP305G Music Performance; Flute
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP305H Music Performance; Oboe
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP305I Music Performance; Clarinet
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP305J **Music Performance; Bassoon**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP305K **Music Performance; Saxophone**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP305L **Music Performance; Horn**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP305M **Music Performance; Trumpet**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP305N **Music Performance; Trombone**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP305O **Music Performance; Tuba**
(Perm req) Credits: 2-4 Grading Method: Regular
Contact department for information to register for this course.

MUSP305P **Music Performance; Euphonium**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP305Q **Music Performance; Percussion**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP305S **Music Performance; Guitar**
(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP305V	Music Performance; Harp
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP306A	Music Performance; Piano
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP306B	Music Performance; Voice
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP306C	Music Performance; Violin
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP306D	Music Performance; Viola
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP306E	Music Performance; Cello
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP306F	Music Performance; Bass
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP306G	Music Performance; Flute
(Perm req)	Credits: 2 Grading Method: Regular
	Contact department for information to register for this course.

MUSP306H	Music Performance; Oboe
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(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP306I Music Performance; Clarinet

(Perm req) Credits: 2 Grading Method: Regular
Contact department for information to register for this course.

MUSP306J Music Performance; Bassoon

(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP306K Music Performance; Saxophone

(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP306L Music Performance; Horn

(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP306M Music Performance; Trumpet

(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP306N Music Performance; Trombone

(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP306O Music Performance; Tuba

(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP306P Music Performance; Euphonium

(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP306Q Music Performance; Percussion
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP306S Music Performance; Guitar
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP306V Music Performance; Harp
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP315A Music Performance; Piano
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP315B Music Performance; Voice
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP315C Music Performance; Violin
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP315D Music Performance; Viola
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP315E

(Perm req)

Credits: 2 Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP315F

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315G

(Perm req)

Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315H

(Perm req)

Credits: 2 Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP315I

(Perm req)

Credits: 2 Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP315J

(Perm req)

Credits: 2 Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP315K

(Perm req)

Credits: 2 Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP315L

(Perm req)

Credits: 2 Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP315M	Music Performance; Trumpet
(Perm req)	Credits: 2 Grading Method: Regular, Audit Contact department for information to register for this course.
MUSP315N	Music Performance; Trombone
(Perm req)	Credits: 2 Grading Method: Regular, Audit Contact department for information to register for this course.
MUSP315O	Music Performance; Tuba
(Perm req)	Credits: 2 Grading Method: Regular, Audit Contact department for information to register for this course.
MUSP315P	Music Performance; Euphonium
(Perm req)	Credits: 2 Grading Method: Regular, Audit Contact department for information to register for this course.
MUSP315Q	Music Performance; Percussion
(Perm req)	Credits: 2 Grading Method: Regular, Audit Contact department for information to register for this course.
MUSP315S	Music Performance; Guitar
(Perm req)	Credits: 2-4 Grading Method: Regular, Audit Contact department for information to register for this course.
MUSP315T	Music Performance; Composition
(Perm req)	Credits: 2 Grading Method: Regular, Audit Contact department for information to register for this course.
MUSP315V	Music Performance; Harp
(Perm req)	Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

MUSP315W **Music Performance; Electronic Composition**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP316A Music Performance; Piano

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP316B Music Performance; Voice

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP316C **Music Performance; Violin**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP316D **Music Performance; Viola**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP316E **Music Performance; Cello**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP316F **Music Performance; Bass**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP316G **Music Performance; Flute**

(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP316H Music Performance; Oboe
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP316I Music Performance; Clarinet
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP316J Music Performance; Bassoon
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP316K Music Performance; Saxophone
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP316L Music Performance; Horn
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP316M Music Performance; Trumpet
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP316N Music Performance; Trombone
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

Contact department for information to register for this course.

Contact department for information to register for this course.

Contact department for information to register for this course.

Contact department for information to register for this course.

Contact department for information to register for this course.

Contact department for information to register for this course.

Contact department for information to register for this course.

Credits: 2 Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402C

Music Performance; Violin

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402D

Music Performance; Viola

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402E

Music Performance; Cello

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402F

Music Performance; Bass

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402G

Music Performance; Flute

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402H

Music Performance; Oboe

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402I

Music Performance; Clarinet

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402J

Music Performance; Bassoon

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402K

Music Performance; Saxophone

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402L

Music Performance; Horn

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402M

Music Performance; Trumpet

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402N

Music Performance; Trombone

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402O

Music Performance; Tuba

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402P

Music Performance; Euphonium

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402Q

Music Performance; Percussion

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP402S

Music Performance; Guitar

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403A

Music Performance; Piano

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403B

Music Performance; Voice

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403C

Music Performance; Violin

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403D

Music Performance; Viola

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403E

Music Performance; Cello

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403F

Music Performance; Bass

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403G

Music Performance; Flute

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403H

Music Performance; Oboe

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403I

Music Performance; Clarinet

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403J

Music Performance; Bassoon

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403K

Music Performance; Saxophone

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403L

Music Performance; Horn

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403M

Music Performance; Trumpet

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403N

Music Performance; Trombone

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403O Music Performance; Tuba

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403P Music Performance; Euphonium

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403Q Music Performance; Percussion

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP403S Music Performance; Guitar

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course, in the minor series.

Contact department for information to register for this course.

MUSP409A Music Performance; Piano

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409B Music Performance; Voice

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409C

Music Performance; Violin

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409D

Music Performance; Viola

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409E

Music Performance; Cello

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409F

Music Performance; Bass

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409G

Music Performance; Flute

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409H

Music Performance; Oboe

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409I

Music Performance; Clarinet

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409J

Music Performance; Bassoon

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409K

Music Performance; Saxophone

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409L

Music Performance; Horn

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409M

Music Performance; Trumpet

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409N

Music Performance; Trombone

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409O

Music Performance; Tuba

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409P

Music Performance; Euphonium

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409Q

Music Performance; Percussion

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409S

Music Performance; Guitar

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP409V

Music Performance; Harp

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series.

Contact department for information to register for this course.

MUSP410A

Music Performance; Piano

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410B

Music Performance; Voice

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410C

Music Performance; Violin

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410D

Music Performance; Viola

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410E

Music Performance; Cello

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410F

Music Performance; Bass

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410G

Music Performance; Flute

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410H

Music Performance; Oboe

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410I

Music Performance; Clarinet

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410J

Music Performance; Bassoon

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410K

Music Performance; Saxophone

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410L

Music Performance; Horn

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410M

Music Performance; Trumpet

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410N

Music Performance; Trombone

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410O

Music Performance; Tuba

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410P

Music Performance; Euphonium

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410Q

Music Performance; Percussion

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410S

Music Performance; Guitar

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP410V

Music Performance; Harp

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the principal series. Recital required.

Contact department for information to register for this course.

MUSP419A Music Performance; Piano

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419B Music Performance; Voice

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419C Music Performance; Violin

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419D Music Performance; Viola

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419E Music Performance; Cello

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419F Music Performance; Bass

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419G Music Performance; Flute

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419H Music Performance; Oboe

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419I Music Performance; Clarinet

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419J Music Performance; Bassoon

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419K Music Performance; Saxophone

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419L Music Performance; Horn

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419M

Music Performance; Trumpet

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419N

Music Performance; Trombone

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419O

Music Performance; Tuba

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419P

Music Performance; Euphonium

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419Q

Music Performance; Percussion

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419S

Music Performance; Guitar

(Perm req)

Credits: 2

Grading Method: Regular

Senior course in the major series.

Contact department for information to register for this course.

MUSP419T

Music Performance; Composition

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419V

Music Performance; Harp

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP419W

Music Performance; Electronic Composition

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Senior course in the major series.

Contact department for information to register for this course.

MUSP420A

Senior Recital; Senior Recital

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420B

Senior Recital; Senior Recital

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420C

Senior Recital; Senior Recital

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420J

Senior Recital; Senior Recital

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420K

Senior Recital; Senior Recital

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420L

Senior Recital; Senior Recital

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420M

Senior Recital; Senior Recital

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420N

Senior Recital; Senior Recital

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420O

Senior Recital; Senior Recital

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420P

Senior Recital; Senior Recital

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420Q

Senior Recital; Senior Recital

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420T

Senior Recital; Senior Recital

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420V

Senior Recital; Senior Recital

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP420W

Senior Recital; Senior Recital

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

General Education: DSSP

Senior course in the major series. Recital required.

Contact department for information to register for this course.

MUSP609A

Interpretation and Repertoire; Piano

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP609B Interpretation and Repertoire; Voice

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP609D Interpretation and Repertoire; Viola

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP609E Interpretation and Repertoire; Cello

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP609F Interpretation and Repertoire; Bass

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP609G Interpretation and Repertoire; Flute

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP609H Interpretation and Repertoire; Oboe

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP609I Interpretation and Repertoire; Clarinet

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP609J Interpretation and Repertoire; Bassoon

(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP609K Interpretation and Repertoire; Saxophone
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP609L Interpretation and Repertoire; Horn
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP609M Interpretation and Repertoire; Trumpet
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP609N Interpretation and Repertoire; Trombone
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP609O Interpretation and Repertoire; Tuba
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP609P Interpretation and Repertoire; Euphonium
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP609Q Interpretation and Repertoire; Percussion
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Contact department for information to register for this course.

Credits: 2 Grading Method: Regular,
Audit

Contact department for information to register for this course.

Credits: 2 Grading Method: Regular, Audit

Contact department for information to register for this course.

Credits: 2 Grading Method: Regular,
Audit

Contact department for information to register for this course.

Credits: 2 Grading Method: Regular,
Audit

Contact department for information to register for this course.

Credits: 2 Grading Method: Regular,
Audit

Contact department for information to register for this course.

Credits: 4 Grading Method: Regular,
Audit

Contact department for information to register for this course.

Credits: 4 Grading Method: Regular,
Audit

Contact department for information to register for this course.

Credits: 4 Grading Method: Regular, Audit

Contact department for information to register for this course.

(Perm req)

Contact department for information to register for this course.

(Perm req)

Contact department for information to register for this course.

(Perm req)

Contact department for information to register for this course.

(Perm req)

Contact department for information to register for this course.

(Perm req)

Contact department for information to register for this course.

(Perm req)

Contact department for information to register for this course.

(Perm req)

Contact department for information to register for this course.

(Perm req)

Credits: 4 Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP610M

Graduate Music Performance; Trumpet

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP610N

Graduate Music Performance; Trombone

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP610O

Graduate Music Performance; Tuba

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP610P

Graduate Music Performance; Euphonium

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP610Q

Graduate Music Performance; Percussion

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP610S

Graduate Music Performance; Guitar

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP610T

Graduate Music Performance; Composition

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

Contact department for information to register for this course.

MUSP610U

Graduate Music Performance; Conducting

(Perm req) Credits: 4 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP610V Graduate Music Performance; Harp
(Perm req) Credits: 4 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP610X Graduate Music Performance; Historical Instruments - Keyboard
(Perm req) Credits: 4 Grading Method: Regular,
Audit
Contact department for information to register for this course.

MUSP619A Interpretation and Repertoire; Piano
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.
Contact department for information to register for this course.

MUSP619B Interpretation and Repertoire; Voice
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.
Contact department for information to register for this course.

MUSP619C Interpretation and Repertoire; Violin
(Perm req) Credits: 2 Grading Method: Regular,
Audit
Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.
Contact department for information to register for this course.

MUSP619D Interpretation and Repertoire; Viola
(Perm req) Credits: 2 Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619E Interpretation and Repertoire; Cello

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619F Interpretation and Repertoire; Bass

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619G Interpretation and Repertoire; Flute

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619H Interpretation and Repertoire; Oboe

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619I Interpretation and Repertoire; Clarinet

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619J

Interpretation and Repertoire; Bassoon

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619K

Interpretation and Repertoire; Saxophone

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619L

Interpretation and Repertoire; Horn

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619M

Interpretation and Repertoire; Trumpet

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619N

Interpretation and Repertoire; Trombone

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619O**Interpretation and Repertoire; Tuba**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619P**Interpretation and Repertoire; Euphonium**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619Q**Interpretation and Repertoire; Percussion**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619S**Interpretation and Repertoire; Guitar**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619T**Interpretation and Repertoire; Composition**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619U**Interpretation and Repertoire; Conducting**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619V

Interpretation and Repertoire; Harp

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619W

Interpretation and Repertoire; Electronic Composition

(Perm req)

Credits: 2-4

Grading Method: Regular,
Audit

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP619X

Interpretation and Repertoire; Opera

(Perm req)

Credits: 2

Grading Method: Regular

Prerequisite: departmental audition and permission of Department Chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP620A

Graduate Music Performance; Piano

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620B

Graduate Music Performance; Voice

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620C Graduate Music Performance; Violin

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620D Graduate Music Performance; Viola

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620E Graduate Music Performance; Cello

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620F Graduate Music Performance; Bass

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620G Graduate Music Performance; Flute

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620H Graduate Music Performance; Oboe

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620I Graduate Music Performance; Clarinet

(Perm req)

Credits: 4 Grading Method: Regular,
Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620J Graduate Music Performance; Bassoon

(Perm req)

Credits: 4 Grading Method: Regular,
Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620K Graduate Music Performance; Saxophone

(Perm req)

Credits: 4 Grading Method: Regular,
Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620L Graduate Music Performance; Horn

(Perm req)

Credits: 4 Grading Method: Regular,
Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620M Graduate Music Performance; Trumpet

(Perm req)

Credits: 4 Grading Method: Regular,
Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620N Graduate Music Performance; Trombone

(Perm req)

Credits: 4 Grading Method: Regular,
Audit

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

MUSP620O Graduate Music Performance; Tuba
(Perm req) Credits: 4 Grading Method: Regular,
Audit
Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.
Contact department for information to register for this course.

MUSP620P Graduate Music Performance; Euphonium
(Perm req) Credits: 4 Grading Method: Regular,
Audit
Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.
Contact department for information to register for this course.

MUSP620Q Graduate Music Performance; Percussion
(Perm req) Credits: 4 Grading Method: Regular,
Audit
Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.
Contact department for information to register for this course.

MUSP620S Graduate Music Performance; Guitar
(Perm req) Credits: 4 Grading Method: Regular,
Audit
Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.
Contact department for information to register for this course.

MUSP620T Graduate Music Performance; Composition
(Perm req) Credits: 4 Grading Method: Regular,
Audit
Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.
Contact department for information to register for this course.

MUSP620U Graduate Music Performance; Conducting
(Perm req) Credits: 4 Grading Method: Regular,
Audit
Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.
Contact department for information to register for this course.

(Perm req)

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

(Perm req)

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

(Perm req)

Prerequisite: MUSP 619 and permission of Department Chairman. Recital course in the major series.

Contact department for information to register for this course.

(Perm req)

Prerequisite: MUSP619. Corequisite: MUSC758. Restriction: Permission of ARHU-School of Music department.

Private music instruction in preparation for public performance.

Contact department for information to register for this course.

(Perm req)

Private individual instruction on a secondary instrument.

Contact department for information to register for this course.

(Perm req)

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719B Interpretation and Repertoire; Voice

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719C Interpretation and Repertoire; Violin

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719D Interpretation and Repertoire; Viola

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719E Interpretation and Repertoire; Cello

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719F Interpretation and Repertoire; Bass

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719G**Interpretation and Repertoire; Flute**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719H**Interpretation and Repertoire; Oboe**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719I**Interpretation and Repertoire; Clarinet**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719J**Interpretation and Repertoire; Bassoon**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719K**Interpretation and Repertoire; Saxophone**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719L**Interpretation and Repertoire; Horn**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719M

Interpretation and Repertoire; Trumpet

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719N

Interpretation and Repertoire; Trombone

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719O

Interpretation and Repertoire; Tuba

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719P

Interpretation and Repertoire; Euphonium

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719Q

Interpretation and Repertoire; Percussion

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719T Interpretation and Repertoire; Composition

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719U Interpretation and Repertoire; Conducting

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719V Interpretation and Repertoire; Harp

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP719W Interpretation and Repertoire; Electronic Composition

(Perm req)

Credits: 2-4

Grading Method: Regular,
Audit

Prerequisite: departmental audition, admission to doctoral program in the major series and permission of department chairman. Repeatable to a maximum of 12 credits.

Contact department for information to register for this course.

MUSP815A Interpretation, Performance, and Pedagogy; Piano

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815B Interpretation, Performance, and Pedagogy; Voice

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815C Interpretation, Performance, and Pedagogy; Violin

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815D Interpretation, Performance, and Pedagogy; Viola

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815E Interpretation, Performance, and Pedagogy; Cello

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815F Interpretation, Performance, and Pedagogy; Bass

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815G Interpretation, Performance, and Pedagogy; Flute

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815H Interpretation, Performance, and Pedagogy; Oboe

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815I Interpretation, Performance, and Pedagogy; Clarinet

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815J Interpretation, Performance, and Pedagogy; Bassoon

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815K Interpretation, Performance, and Pedagogy; Saxophone

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815L Interpretation, Performance, and Pedagogy; Horn

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815M Interpretation, Performance, and Pedagogy; Trumpet

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815N Interpretation, Performance, and Pedagogy; Trombone

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815O Interpretation, Performance, and Pedagogy; Tuba

(Perm req)

Credits: 4

Grading Method: Regular,
Audit

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815P Interpretation, Performance, and Pedagogy; Euphonium

(Perm req)

Credits: 4

Grading Method: Regular

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815Q Interpretation, Performance, and Pedagogy; Percussion

(Perm req)

Credits: 4

Grading Method: Regular

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815T **Interpretation, Performance, and Pedagogy; Composition**
(Perm req) Credits: 4 Grading Method: Regular

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815U **Interpretation, Performance, and Pedagogy; Conducting**
(Perm req) Credits: 4 Grading Method: Regular

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP815W **Interpretation, Performance, and Pedagogy; Electronic Composition**
(Perm req) Credits: 4 Grading Method: Regular

A seminar in pedagogy and the pedagogical literature for the doctoral performer, with advanced instruction at the instrument, covering appropriate compositions. Required of all candidates for the D.M.A. Degree in literature-performance. Prerequisite: doctoral standing in performance and permission of department chairman. Recital course.

Contact department for information to register for this course.

MUSP816A **Interpretation, Performance, and Pedagogy; Piano**
(Perm req) Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816B **Interpretation, Performance, and Pedagogy; Voice**
(Perm req) Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816C **Interpretation, Performance, and Pedagogy; Violin**
(Perm req) Credits: 4 Grading Method: Regular
Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.
Contact department for information to register for this course.

MUSP816D **Interpretation, Performance, and Pedagogy; Viola**
(Perm req) Credits: 4 Grading Method: Regular
Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.
Contact department for information to register for this course.

MUSP816E **Interpretation, Performance, and Pedagogy; Cello**
(Perm req) Credits: 4 Grading Method: Regular
Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.
Contact department for information to register for this course.

MUSP816F **Interpretation, Performance, and Pedagogy; Bass**
(Perm req) Credits: 4 Grading Method: Regular
Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.
Contact department for information to register for this course.

MUSP816G **Interpretation, Performance, and Pedagogy; Flute**
(Perm req) Credits: 4 Grading Method: Regular
Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.
Contact department for information to register for this course.

MUSP816H **Interpretation, Performance, and Pedagogy; Oboe**
(Perm req) Credits: 4 Grading Method: Regular
Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.
Contact department for information to register for this course.

MUSP816I **Interpretation, Performance, and Pedagogy; Clarinet**
(Perm req) Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816J

Interpretation, Performance, and Pedagogy; Bassoon

(Perm req)

Credits: 4

Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816K

Interpretation, Performance, and Pedagogy; Saxophone

(Perm req)

Credits: 4

Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816L

Interpretation, Performance, and Pedagogy; Horn

(Perm req)

Credits: 4

Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816M

Interpretation, Performance, and Pedagogy; Trumpet

(Perm req)

Credits: 4

Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816N

Interpretation, Performance, and Pedagogy; Trombone

(Perm req)

Credits: 4

Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP816O

Interpretation, Performance, and Pedagogy; Tuba

(Perm req)

Credits: 4

Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

Contact department for information to register for this course.

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Contact department for information to register for this course.

Contact department for information to register for this course.

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 815 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817A Interpretation, Performance, and Pedagogy; Piano

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817B Interpretation, Performance, and Pedagogy; Voice

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817C Interpretation, Performance, and Pedagogy; Violin

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817D Interpretation, Performance, and Pedagogy; Viola

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817E Interpretation, Performance, and Pedagogy; Cello

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817F Interpretation, Performance, and Pedagogy; Bass

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817G **Interpretation, Performance, and Pedagogy; Flute**
(Perm req) Credits: 4 Grading Method: Regular
Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.
Contact department for information to register for this course.

MUSP817H **Interpretation, Performance, and Pedagogy; Oboe**
(Perm req) Credits: 4 Grading Method: Regular
Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.
Contact department for information to register for this course.

MUSP817I **Interpretation, Performance, and Pedagogy; Clarinet**
(Perm req) Credits: 4 Grading Method: Regular
Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.
Contact department for information to register for this course.

MUSP817J **Interpretation, Performance, and Pedagogy; Bassoon**
(Perm req) Credits: 4 Grading Method: Regular
Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.
Contact department for information to register for this course.

MUSP817K **Interpretation, Performance, and Pedagogy; Saxophone**
(Perm req) Credits: 4 Grading Method: Regular
Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.
Contact department for information to register for this course.

MUSP817L **Interpretation, Performance, and Pedagogy; Horn**
(Perm req) Credits: 4 Grading Method: Regular
Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.
Contact department for information to register for this course.

MUSP817M **Interpretation, Performance, and Pedagogy; Trumpet**
(Perm req) Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817N Interpretation, Performance, and Pedagogy; Trombone

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817O Interpretation, Performance, and Pedagogy; Tuba

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817P Interpretation, Performance, and Pedagogy; Euphonium

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817Q Interpretation, Performance, and Pedagogy; Percussion

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817T Interpretation, Performance, and Pedagogy; Composition

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817U Interpretation, Performance, and Pedagogy; Conducting

(Perm req)

Credits: 4 Grading Method: Regular

Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.

Contact department for information to register for this course.

MUSP817W Interpretation, Performance, and Pedagogy; Electronic Composition

(Perm req)

Credits: 4 Grading Method: Regular

*Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.***Contact department for information to register for this course.****MUSP817X Interpretation, Performance, and Pedagogy**

(Perm req)

Credits: 4 Grading Method: Regular,
Audit*Recital course. Prerequisite: MUSP 816 and permission of Department Chairman.***Contact department for information to register for this course.****MUSP898 Pre-Candidacy Research**

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.**MUSP899 Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

NACS Neuroscience & Cognitive Science Fall 2019

NACS608 Neuroscience and Cognitive Science Seminar

Credits: 1 Grading Method: Regular

Special seminar topics in Neuroscience and Cognitive Science.

0101	Ricardo Araneda	Seats (Total: 20)
	F 10:15am - 11:15am	BRB 1103

NACS640 Foundational Readings Seminar

(Perm req)

Credits: 2 Grading Method: Regular

*Restriction: Permission of instructor; and must be in Neurosciences and Cognitive Sciences (Doctoral) program. Credit only granted for: NACS640 or NACS728R. Formerly: NACS728R.**An introduction to the breadth of research in Neuroscience and Cognitive Science. Faculty will present papers to provide historical context and introduction to important issues in the fields of their research.*

0101	Erica Glasper Andrews	Seats (Total: 12)
	Tu 1:00pm - 3:00pm	BPS 1103

NACS641 Introduction to Neurosciences

(Perm req)

Credits: 4 Grading Method: Regular,
Audit

Restriction: Permission of instructor.

Detailed examination of neurophysiology and sensorimotor systems.

0101	Jens Herberholz	Seats (Total: 15)
	MW 3:00pm - 4:45pm	BPS 0283

NACS643 Computational Neuroscience

(Perm req)

Credits: 4 Grading Method: Regular,
Audit

Prerequisite: NACS641; and must have completed a course in calculus; and permission of instructor.

Provides a mathematical foundation in computational neuroscience.

0101	Daniel Butts	Seats (Total: 20)
	MW 12:00pm - 1:50pm	PLS 1115

NACS645 Cognitive Science

Credits: 4 Grading Method: Regular,
Audit

Credit only granted for: NACS645 or NACS728Y. Formerly: NACS728Y.

A study of mental representations and computations. Issues examined include computation, representations, decisions, modularity, evolution, innateness, and reductionism.

0101	Yi Ting Huang, Robert Slevc	Seats (Total: 25)
	MW 10:00am - 11:45am	COL 0211

NACS728J Selected Topics in Neuroscience and Cognitive Science; Biology of Chemosensory Systems

Credits: 3 Grading Method: Regular

Graduate seminar on selected topics in contemporary neuroscience and Cognitive science. Extensive readings from the primary literature. Topics vary by semester.

0101	Ricardo Araneda	Seats (Total: 10)
	MW 2:00pm - 3:15pm	BPS 1230

NACS728N Selected Topics in Neuroscience and Cognitive Science; Diseases of the Nervous System

Credits: 3 Grading Method: Regular,
 Audit

Graduate seminar on selected topics in contemporary neuroscience and Cognitive science. Extensive readings from the primary literature. Topics vary by semester.

0101	Quentin Gaudry	Seats (Total: 8)
	TuTh 12:30pm - 1:45pm	BPS 1236

NACS728O Selected Topics in Neuroscience and Cognitive Science; Hormones and Behavior

Credits: 3 Grading Method: Regular,
 Audit

Graduate seminar on selected topics in contemporary neuroscience and Cognitive science. Extensive readings from the primary literature. Topics vary by semester.

Prerequisite: PSYC301 or equivalent. For students who have had PSYC301, written permission of the instructor and department is required. Restricted to PSYC (major code 20010) students only. Cross-listed with NACS728O. Credit only granted for PSYC489G or NACS728O. Formerly: PSYC309Z. This course presents a comprehensive overview of the field of behavioral endocrinology, the study of the relationship between hormones and behavior, from a psychobiological perspective. We will examine the major mammalian endocrine systems, how hormones influence sex determination, how hormones underlie sex differences in brain structure and function, the role of hormones in parental and social behaviors, mood disorders, homeostasis, cognition and stress. Both normal and abnormal hormonal pathologies will be discussed. Due to the physiological and experimental perspectives of this course, much of the phenomenology that we will be studying will be based on research in species other than humans. This species comparative approach will reveal interesting "ways of doing things" that are intriguingly different from how "humans" do things.

0101	Erica Glasper Andrews	Seats (Total: 40)
	TuTh 9:30am - 10:45am	BPS 1238

NACS798 Master's Non-Thesis Research

Credits: 1-3 Grading Method: Regular

Individual research course for NACS non-thesis MS degree

Contact department for information to register for this course.

NACS799**Master's Thesis Research**

Credits: 1-3 Grading Method: Regular

*Individualized research course for NACS thesis MS degree***Contact department for information to register for this course.**

NACS898**Pre-Candidacy Research**

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

NACS899**Doctoral Dissertation Research**

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

*Individual instruction course: contact department or instructor to obtain section number***Contact department for information to register for this course.**

NAVY**Navy****Fall 2019**

NAVY100**Introduction to Naval Science**

Credits: 3 Grading Method: Regular

Introduction to the naval profession and concepts of sea power. Major topics explored are the mission, strategy, organization, and descriptions of the U.S. Navy and Marine Corps. Students will gain a basic understanding of warfighting capabilities, required leadership skills, training and education, and the duties and responsibilities of a U.S. Navy and Marine Corps Junior Officer. The student will learn Naval courtesy and customs, military justice, and nomenclature as well as the professional competencies required to become a naval officer.

0101	Barry Feinstein	Seats (Total: 75)
	MW 8:00am - 9:15am	ARM 0135
FC01	Barry Feinstein	Seats (Total: 10)
	MW 8:00am - 9:15am	ARM 0135
<i>Restricted to students in Freshmen Connection.</i>		

NAVY108**Naval Science Leadership Lab**

Credits: 1 Grading Method: Regular

Introduces the student to a variety of instructional sessions and/or activities that will develop the leadership component of the Naval ROTC program. The Naval Science leadership lab may include, but not be limited to, close-order drill, physical fitness training, ceremonial functions, Department of the Navy policy, guest lecturers, general military training (GMT), Anti-Terrorism Force Protection (ATFP), traffic safety, nutrition, stress management, prevention of sexual harassment, and operations security.

0101	Troy Mong, Nathaniel Kaine Th 6:00am - 7:50am	Seats (Total: 150) ESJ 1224
FC01	Nathaniel Kaine Th 6:00am - 7:50am <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 10) ESJ 1224

NAVY200

(Perm req)

Leadership and Management

Credits: 3 Grading Method: Regular

Restriction: Permission of UGST-Navy ROTC. Additional information: Priority enrollment will be given to students enrolled in the NROTC program.

Introductory course designed to familiarize students with the theories, processes, and behaviors that enable effective leadership and managerial competence. Students will engage in analytical discussions, review leadership development and education, and Navy/Marine Corps-based case study discussions in order to develop their understanding of personal strengths, values and growth opportunities in the context of team, group and organizational leadership.

0101	Stephen Kosloski TuTh 8:00am - 9:15am	Seats (Total: 40) SQH 1117
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NAVY300

(Perm req)

Naval Ship Systems I (Engineering)

Credits: 3 Grading Method: Regular

Recommended: MATH140 and MATH141. Restriction: Permission of UGST-Navy ROTC. Additional information: Priority enrollment will be given to students enrolled in the NROTC program.

Introduces the student to a comprehensive fundamental understanding of United States naval engineering principles and systems. Topics include thermodynamics, incompressible fluid flow, electrical theory, hydraulics and pneumatics, power train components, fluid/lube oil systems, desalination, fundamentals of nuclear power, propulsion systems (internal combustion, gas turbines, and steam), electrical distribution, ship stability and control and damage control. Students will also examine case studies to apply and analyze course topics within naval ships systems contexts.

0101	Edward Butler MW 8:00am - 9:15am	Seats (Total: 25) ARM 0120
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NAVY400 Naval Operations and Seamanship

(Perm req)

Credits: 3 Grading Method: Regular

Recommended: NAVY201. Restriction: Permission of UGST-Navy ROTC. Additional information: Priority enrollment will be given to students enrolled in the NROTC program.

Capstone course for senior NROTC Navy-option midshipmen in advanced navigation, communications, naval operations, and naval warfare. Students learn through simulation in a computer classroom known as the Maritime Skills Simulator (MSS), in addition to lectures, discussions, and qualitative and quantitative tests/examinations. Students will engage in discussions regarding the moral and ethical responsibilities of military leaders, as well as the essential attributes of character required for effective leadership.

0101	Barry Feinstein	Seats (Total: 25)
	TuTh 8:00am - 9:15am	ARM 0120

NFSC Nutrition and Food Science Fall 2019

The following courses may involve the use of animals. Students who are concerned about the use of animals in teaching have the responsibility to contact the instructor, prior to course enrollment, to determine whether animals are to be used in the course, whether class exercises involving animals are optional or required and what alternatives, if any, are available.

NFSC100 Elements of NutritionCredits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: LS General Education: DSNS

Fundamentals of human nutrition. Nutrient requirements related to changing individual and family needs.

0101	Hee-Jung Song	Seats (Total: 25)
	MW 1:00pm - 1:50pm	TYD 0130
	Th 8:30am - 9:20am	JMZ 3203 Discussion
0103	Hee-Jung Song	Seats (Total: 25)
	MW 1:00pm - 1:50pm	TYD 0130
	W 11:00am - 11:50am	KEY 0120 Discussion
0104	Hee-Jung Song	Seats (Total: 25)
	MW 1:00pm - 1:50pm	TYD 0130
	Th 12:30pm - 1:20pm	JMZ 0122 Discussion

0105	Hee-Jung Song MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 25) TYD 0130 SYM 0209	Discussion
0106	Hee-Jung Song MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 25) TYD 0130 SYM 0209	Discussion
0107	Hee-Jung Song MW 1:00pm - 1:50pm W 10:00am - 10:50am	Seats (Total: 25) TYD 0130 KEY 0120	Discussion
0108	Hee-Jung Song MW 1:00pm - 1:50pm W 2:00pm - 2:50pm	Seats (Total: 25) TYD 0130 JMZ 0118	Discussion
0109	Hee-Jung Song MW 1:00pm - 1:50pm Tu 2:00pm - 2:50pm	Seats (Total: 25) TYD 0130 JMZ 0120	Discussion
0112	Hee-Jung Song MW 1:00pm - 1:50pm W 3:00pm - 3:50pm	Seats (Total: 25) TYD 0130 JMZ 0118	Discussion
0113	Hee-Jung Song MW 1:00pm - 1:50pm W 12:00pm - 12:50pm	Seats (Total: 25) TYD 0130 KEY 0123	Discussion
0114	Hee-Jung Song MW 1:00pm - 1:50pm Th 11:00am - 11:50am	Seats (Total: 25) TYD 0130 SKN 1112	Discussion
0115	Hee-Jung Song MW 1:00pm - 1:50pm F 12:00pm - 12:50pm	Seats (Total: 25) TYD 0130 KEY 0123	Discussion
FC01	Nadine Sahyoun, Seong-Ho Lee, Hee-Jung Song, Shaik Rahaman MW 4:30pm - 5:20pm F 11:30am - 12:20pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 26) SYM 0200 JMZ 3205	Discussion

FC02	Shaik Rahaman, Hee-Jung Song, Seong-Ho Lee, Nadine Sahyoun	Seats (Total: 26)		
	MW 4:30pm - 5:20pm	SYM 0200		
	F 1:00pm - 1:50pm	WDS 0104		Discussion
	<i>Restricted to students in Freshmen Connection.</i>			

NFSC100H Elements of Nutrition

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: LS General Education: DSNS

Fundamentals of human nutrition. Nutrient requirements related to changing individual and family needs.

For general honors students only.

0101	Hee-Jung Song	Seats (Total: 12)		
	MW 1:00pm - 1:50pm	TYD 0130		
	Tu 3:00pm - 3:50pm	JMZ 1123		Discussion

NFSC112 Food: Science and Technology

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: LS General Education: DSNS

Introduction to the realm of food science, food technology and food processing. An overview of the largest industry in the U.S. with emphasis on the science of food and the technology of food preservation from harvest through processing and packaging to distribution and consumer utilization.

0101	Qin Wang, Abani Pradhan	Seats (Total: 30)		
	MW 10:00am - 10:50am	MMH 1400		
	Th 12:30pm - 1:20pm	TYD 2108		Discussion
0102	Abani Pradhan, Qin Wang	Seats (Total: 30)		
	MW 10:00am - 10:50am	MMH 1400		
	Th 4:00pm - 4:50pm	JMZ 0122		Discussion
0103	Abani Pradhan, Qin Wang	Seats (Total: 30)		
	MW 10:00am - 10:50am	MMH 1400		
	F 12:00pm - 12:50pm	JMZ 0208		Discussion
0104	Abani Pradhan, Qin Wang	Seats (Total: 30)		
	MW 10:00am - 10:50am	MMH 1400		
	F 3:00pm - 3:50pm	JMZ 0208		Discussion

0105	Qin Wang, Abani Pradhan MW 10:00am - 10:50am W 2:00pm - 2:50pm	Seats (Total: 30) MMH 1400 WDS 0104	Discussion
0106	Qin Wang, Abani Pradhan MW 10:00am - 10:50am W 3:00pm - 3:50pm	Seats (Total: 30) MMH 1400 JMZ 0103	Discussion
FC01	Qin Wang, Abani Pradhan MW 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 28) TYD 1102	

NFSC220

Diet: Is it a cause or a solution

Credits: 3 Grading Method: Regular, Audit General Education: DSSP, SCIS

If diet is a very straightforward topic; then why and how does this simple matter result in complicated health problems? Diet can provide a simple solution to numerous health issues. So, why do many people fail to follow this seemingly simple solution and still suffer from obesity and other diet-related diseases? Diet is a topic that most people know but few people understand. In addition, diet has become one of the most important lenses for looking at a variety of social, economic, and cultural issues. Since the concept of diet is continuum and has multifaceted aspects, we need to understand it in broad and multidisciplinary perspectives including social, cultural and economic aspects.

0101	Monica Whent MWF 12:00pm - 12:50pm	Seats (Total: 30) ITV 1100
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NFSC298

Sports Nutrition Internship Practicum

(Perm req)

Credits: 1 Grading Method: Sat-Fail

Internship where individuals will be able to gain hands on experience working in collegiate athletics. Students will interact with an interdisciplinary team including registered dietitians, coaches, trainers, physicians and others to develop and enhance nutrition-related knowledge and skills. They will also gain invaluable experience and exposure to the day-to-day duties of a collegiate sports dietitian.

0101	Colleen Carrion, Politimi Karamihas Tu 1:00pm - 1:50pm Contact instructor or department for details.	Seats (Total: 20) Location: TBA
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NFSC350

Foodservice Operations

(Perm req)

Credits: 5

Grading Method: Regular

Prerequisite: Minimum grade of C- in BSCI223 and BMGT364. Restriction: Must be in Nutrition and Food Science: Dietetics program.

Introduction to management. Responsibilities in quantity food production and purchasing in a foodservice operation. Laboratory experience in planning, preparation, and service of meals which meet the nutritional needs of the consumer.

0101	Margaret Udahogora TuTh 4:00pm - 5:15pm Tu 8:00am - 1:30pm	Seats (Total: 9) TYD 1101 MMH 3108	Lab
0102	Margaret Udahogora TuTh 4:00pm - 5:15pm Th 8:00am - 1:30pm	Seats (Total: 9) TYD 1101 MMH 3108	Lab
0103	Margaret Udahogora TuTh 4:00pm - 5:15pm Tu 8:00am - 1:30pm	Seats (Total: 9) TYD 1101 MMH 3401	Lab
0104	Margaret Udahogora TuTh 4:00pm - 5:15pm Th 8:00am - 1:30pm	Seats (Total: 9) TYD 1101 MMH 3401	Lab

NFSC380

Methods of Nutritional Assessment

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Minimum of C- in NFSC315 and BCHM461. Restriction: Must be in Nutrition and Food Science: Food Science program.

Methods of assessing human nutritional status of populations and individuals. These methods include dietary, anthropometric, clinical evaluations and biochemical measurements.

0101	Margaret Udahogora MW 1:00pm - 1:50pm M 2:00pm - 5:00pm	Seats (Total: 15) SKN 0104 SKN 0101	Lab
0102	Margaret Udahogora MW 1:00pm - 1:50pm W 2:00pm - 5:00pm	Seats (Total: 15) SKN 0104 SKN 0101	Lab

NFSC386**Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Prerequisite: Permission of AGNR-Nutrition and Food Science department. Restriction: Junior standing or higher. Formerly: FDSC386 and NUTR386.

Contact department for information to register for this course.

NFSC388**Honors Thesis Research**

Credits: 3-6 Grading Method: Regular

Undergraduate honors thesis research conducted under the direction of an AGNR faculty member in partial fulfillment of the requirements of the College of AGNR Honors Program. The thesis will be defended to a faculty committee.

1301	Qin Wang	Seats (Total: 10)
Contact instructor or department for details.		

NFSC399**Special Problems in Food Science**

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Designed for advanced undergraduates. Specific problems in food science will be assigned.

Contact department for information to register for this course.

NFSC421**Food Chemistry**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BCHM461.

Basic chemical and physical concepts are applied to the composition and properties of foods. Emphasis on the relationship of processing technology to the keeping quality, nutritional value, and acceptability of foods.

0101	Liangli Yu	Seats (Total: 60)
	MW 12:30pm - 1:45pm	LEF 2166

NFSC422**Food Product Research and Development**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: CS General Education: DSSP

Restriction: Senior standing; and must be in a major within AGNR-Nutrition and Food Science department; and permission of AGNR-Nutrition and Food Science department. Formerly: FDSC422.

A capstone course for FDSC majors. A study of the research and development of new food products. Application of food technology, engineering, safety and packaging are integrated by teams of students to develop a new food product from concept to pilot plant scale-up. Students will travel to nearby food processing plants on two to four Saturdays during the semester.

0101	Qin Wang	Seats (Total: 15)	
	W 2:00pm - 2:50pm	PLS 1162	
	F 1:00pm - 5:00pm	MMH 3401	Lab

NFSC423 Food Chemistry Laboratory

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: Must have completed or be concurrently enrolled in NFSC421.

Analysis of the major and minor constituents of food using chemical, physical and instrumental methods in concordance with current food industry and regulatory practices. Laboratory exercises coincide with lecture subjects in NFSC421.

0101	Liangli Yu	Seats (Total: 15)	
	W 8:30am - 9:20am	MMH 3419	
	W 9:30am - 12:20pm	MMH 3419	Lab

NFSC440 Advanced Human Nutrition

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: Minimum of C- in NFSC100, BCHM462 and BSCI440.

A critical study of physiologic, molecular and metabolic influences on utilization of carbohydrates, lipids, proteins, vitamins, macro-and micro- minerals, and nonnutritive components of food. Interactions of these nutrients and food components will be examined relative to maintaining health.

Jointly offered with NFSC678R.

0101	David Lei	Seats (Total: 49)	
	TuTh 2:00pm - 3:40pm	PHY 1402	

NFSC455 Medical Nutrition Therapy 1

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: NFSC380; and must have completed or be concurrently enrolled in NFSC440.

Advanced clinical nutrition course for dietetics or nutrition science majors. Modifications of the normal adequate diet to meet human nutritional needs in acute and chronic diseases and metabolic disorders. Includes energy balance and weight management, nutritional genomics, nutrition counseling, autoimmune disease, nutrition for pediatric conditions.

0101	Monica Whent	Seats (Total: 34)	
	MWF 11:00am - 11:50am	EGR 1104	
	W 2:00pm - 5:00pm	ANS 0412	Lab

NFSC490 Special Problems in Nutrition

(Perm req)

Credits: 2-3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSSP

Prerequisite: NFSC440; and permission of AGNR-Nutrition and Food Science department.

Individually selected problems in the area of human nutrition.

Contact department for information to register for this course.

NFSC498 Selected Topics

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Selected current aspects of food.

Contact department for information to register for this course.

NFSC498A Selected Topics; Individual Study

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Selected current aspects of food.

Contact department for information to register for this course.

NFSC498F Selected Topics; Current Topics in Nutrition and Chronic Disease

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Selected current aspects of food.

Prerequisite: NFSC100 or comparable course, or by permission of the instructor. Analysis of current topics related to diet, nutrition, and human health at cellular, molecular and biochemical level. Further, this course will provide overview of the current methods, and in vitro/vivo model systems used in research. Syllabus includes topics relevant to dietary regulation of genes/proteins and their impact on both physiological and pathological conditions including hyperlipidemia, hyperglycemia, and oncogenesis. This course is designed to help students to understand and apply current scientific concepts and research methods, and to obtain necessary skills in evaluation/interpretation of evidence based scientific data.

0101	Shaik Rahaman	Seats (Total: 20)
	M 2:15pm - 5:00pm	MMH 3112

NFSC498P Selected Topics; Concepts in Food Law and Regulations

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Selected current aspects of food.

0101	Robert Buchanan	Seats (Total: 10)
	W 9:00am - 11:45am	SKN 0101

NFSC498T Selected Topics; Advanced Food Processing and Safety

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Selected current aspects of food.

0101	Rohan Tikekar	Seats (Total: 10)
	Th 3:00pm - 5:30pm	WDS 1114

NFSC498V Selected Topics; Research Design and Methods in Health Promotion and Nutrition Education

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Selected current aspects of food.

0101	Hee-Jung Song	Seats (Total: 15)
	F 2:00pm - 4:45pm	SKN 0101

1. The nature of cancer and the relationship between dietary/nutritional factors and incidence of cancer
2. Basic concepts of general cancer biology with focus on effects of dietary components on genes and their encoded proteins, epigenetic changes and cell signaling
3. Effect of dietary factors in various types of cancer with respect to the benefit of intervention strategies for chemoprevention
4. Scientific knowledge, critical thinking, and the practical application of diet in cancer prevention.

0101	Seong-Ho Lee	Seats (Total: 15)
	Tu 4:00pm - 6:45pm	MMH 3112

Contact department for information to register for this course.

Individual or group study in an area of nutrition.

Prerequisite: NFSC100 or comparable course, or by permission of the instructor. Analysis of current topics related to diet, nutrition, and human health at cellular, molecular and biochemical level. Further, this course will provide overview of the current methods, and in vitro/vivo model systems used in research. Syllabus includes topics relevant to dietary regulation of genes/proteins and their impact on both physiological and pathological conditions including hyperlipidemia, hyperglycemia, and oncogenesis. This course is designed to help students to understand and apply current scientific concepts and research methods, and to obtain necessary skills in evaluation/interpretation of evidence based scientific data.

0101	Shaik Rahaman	Seats (Total: 20)
	M 2:15pm - 5:00pm	MMH 3112

NFSC678R Selected Topics in Nutrition; Advanced Human Nutrition

(Perm req)

Credits: 4 Grading Method: Regular,
Audit

Individual or group study in an area of nutrition.

Jointly offered with NFSC440. Prerequisites: NFSC100, BCHM462, BSCI440, and permission of department.

0101	David Lei	Seats (Total: 49)
	TuTh 2:00pm - 3:40pm	PHY 1402

NFSC678V Selected Topics in Nutrition; Research Design and Methods in Health Promotion and Nutrition Education

Credits: 3 Grading Method: Regular,
Audit

Individual or group study in an area of nutrition.

Cross-listed with NFSC498V. Credit only granted for NFSC678V or NFSC498V. The major goals of this course are to help students understand fundamental behavioral, social models and theories used in the field of nutrition, and to address methodological issues in developing, implementing, and evaluating intervention programs, particularly in the context of nutrition education and behavior. The class topics include types of social and behavioral theories and models applied in the field of nutrition education and public health, conceptual framework building, methodological basics (conceptualizing and operationalizing measurements reliability and validity of scales, psychometric analysis including factor analysis, and issues in evaluating intervention programs.

0101	Hee-Jung Song	Seats (Total: 15)
	F 2:00pm - 4:45pm	SKN 0101

NFSC679P Selected Topics in Food Science; Concepts in Food Law and Regulations

Credits: 3 Grading Method: Regular

Individual or group study in an area of food science.

0101	Robert Buchanan	Seats (Total: 10)
	W 9:00am - 11:45am	SKN 0101

NFSC679R Selected Topics in Food Science; Food Safety and Nutrition Risk Assessment

Credits: 4 Grading Method: Regular

Individual or group study in an area of food science.

0101	Abani Pradhan	Seats (Total: 15)
	M 1:00pm - 2:40pm	WDS 1131
	F 11:00am - 1:30pm	TYD 0117 Lab

NFSC679T Selected Topics in Food Science; Advanced Food Processing and Safety

Credits: 2 Grading Method: Regular

Individual or group study in an area of food science.

0101	Rohan Tikekar	Seats (Total: 10)
	Th 3:00pm - 5:30pm	WDS 1114

NFSC680 Human Nutritional Status

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have complete coursework in advanced nutrition, biochemistry and physiology.

Indirect and direct methods of appraisal of human nutritional status which include: dietary, anthropometric, clinical evaluations and biochemical measures.

0101	Nadine Sahyoun	Seats (Total: 15)
	F 10:00am - 12:45pm	Location: TBA

NFSC688 Seminar in Nutrition and Food Science

Credits: 1-3 Grading Method: Regular,
Audit

This is a seminar course presented by NFSC graduate students and invited speakers in the field of nutrition and food science.

0101	David Lei	Seats (Total: 25)
	W 12:00pm - 12:50pm	SKN 0101

NFSC699 Problems in Nutrition and Food Science

(Perm req)

Credits: 1-4 Grading Method: Regular,
Audit

Credit according to time scheduled and magnitude of problem. An experimental program on a topic other than the student's thesis problem will be conducted. Four credits shall be the maximum allowed toward an advanced degree.

Contact department for information to register for this course.

NFSC735 Food Toxicology

Credits: 3 Grading Method: Regular,
Audit

Recommended: BCHM462, BSCI440, or CHEM131. Cross-listed with MIEH735. Credit only granted for: MIEH735 or NFSC735.

An introduction to basic concepts in toxicology in relation to toxic food contaminants and additives; both synthetic and naturally occurring. Focus on exposure routes, molecular targets and susceptible individuals. Also includes regulatory toxicology with respect food toxins.

0101	Robert Buchanan, Paul Turner	Seats (Total: 20)
	W 1:00pm - 3:45pm	EGR 3102

NFSC799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular

First and second semesters. Credit in proportion to work done and results accomplished. Investigation in some phases of foodservice administration which may form the basis of a thesis. results in the form of a thesis.

Contact department for information to register for this course.

NFSC898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

First and second semesters. Oral reports on special topics or recently published research in nutrition. Distinguished scientists are invited as guest lecturers. A maximum of three credits allowed for the M.S.

Contact department for information to register for this course.

NFSC899 **Doctoral Dissertation Research**
(Perm req) Credits: 6 Grading Method: Regular
Contact department for information to register for this course.

NIAS **National Institute of Aeronautics - North Carolina** **Fall 2019**

NIAS788T **Advanced Topics; Heat Transfer Theory and Applications**
Credits: 3 Grading Method: Regular,
Audit
Contact department for information to register for this course.

NIAS788W **Advanced Topics; Wing Theory**
(Perm req) Credits: 3 Grading Method: Regular,
Audit

TV01	Instructor: TBA	Seats (Total: 1)
Contact instructor or department for details.		

PEER **Health Center** **Fall 2019**

PEER311 **Peer Education Mental Health & Wellness**
(Perm req) Credits: 3 Grading Method: Regular General Education: DVCC

Prerequisite: Students must complete an interview before enrolling in this course. Restriction: Permission of instructor; and minimum cumulative GPA of 2.5. Credit only granted for: HLTH381 or PEER311. Formerly: HLTH 381. Additional information: Students are required to attend a 40-hour training the week before classes begin which will equip them with the information and tools necessary to provide outreach as early as the first week of the Fall classes. Some evening and weekend hours may be required.

Designed to train students to become Peer Educators who are responsible for presenting to members of the campus community about issues surrounding stress management, mental illness, appropriate on/off campus resources, stigma, body image, helping a friend in distress, and other issues related to mental health and wellness, including bystander intervention. Programming is done in classroom settings, residence halls, and at tables during special events.

0101	Sarah Wilson	Seats (Total: 25)
	M 4:00pm - 5:00pm	JMZ 0125
	W 4:00pm - 6:00pm	JMZ 0125

PEER312 **Peer Education: Preventing Power-Based Violence**

(Perm req)

Credits: 3

Grading Method: Regular

General Education: DVCC

Prerequisite: Students must complete an interview before enrolling in this course. Restriction: Permission of instructor; and minimum cumulative GPA of 2.5. Credit only granted for: HLTH382 or PEER312. Formerly: HLTH382. Additional information: Students are required to attend a 40-hour training the week before classes begin which will equip them with the information and tools necessary to provide outreach as early as the first week of the Fall classes. Some evening and weekend hours may be required.

Designed to train students to become Peer Educators who are responsible for presenting to members of the campus community about the complex dynamics surrounding issues of power-based personal violence. This includes: sexual assault, relationship violence, stalking, bystander intervention, consent, and rape culture. Students fully learn the on and off-campus resources for victim/survivors. Programming is done in classroom settings, residence halls, Greek life spaces, and at tables during special events.

0101	Rajan Parikh	Seats (Total: 15)
	M 4:00pm - 5:00pm	JMZ 3120
	W 4:00pm - 6:00pm	JMZ 3120

PEER314

Peer Education: Sexual Health & Wellness

(Perm req)

Credits: 3

Grading Method: Regular

General Education: DVCC

Prerequisite: Students must complete an interview before enrolling in this course. Restriction: Permission of instructor; and minimum cumulative GPA of 2.5. Credit only granted for: HLTH383 or PEER314. Formerly: HLTH383. Additional information: Students are required to attend a 40-hour training the week before classes begin which will equip them with the information and tools necessary to provide outreach as early as the first week of the Fall classes. Some evening and weekend hours may be required.

Designed to train students to become Peer Educators who are responsible for presenting to members of the campus community about issues surrounding Sexually Transmitted Infections, sexual health testing and screening, birth control options, healthy sexuality, consent and communication, condoms and other barrier protection, campus sexual health services, and other issues related to sexual well being including bystander intervention. Programming is done in classroom settings, residence halls, and at tables during special events.

0101	Jenna Messman	Seats (Total: 15)
	M 4:00pm - 5:00pm	JMZ 2117
	W 4:00pm - 6:00pm	JMZ 2117

PEER318

CARE Peer Advocacy

(Perm req)

Credits: 3

Grading Method: Regular

Designed to train students to become Peer Advocates who are responsible for providing crisis and short-term support services for victims of sexual assault, relationship violence, stalking, sexual harassment and child abuse. Students will be meeting with clients and providing emotional support and resources (both on and off campus). During weekly classes, students will be trained in trauma-informed crisis intervention procedures that will not only help them assist clients during in-person sessions but will help them support clients via the crisis cell. Students will be expected to maintain the crisis cell (on a shared basis) throughout the semester as well as maintain 10 hours per week in the CARE office. In addition to maintaining the crisis cell and office hours, during the spring semester students will be tasked with working as a team in planning and executing a Take Back the Night event.

0101	Christina Jay	Seats (Total: 15)
	W 4:30pm - 6:00pm	Location: TBA
	Contact instructor or department for details.	

PEER319 CARE to Stop Violence Outreach Peer Program

(Perm req)

Credits: 3 Grading Method: Regular

A two semester, 6-credit course designed to train students in the knowledge, values and skills to build professional relationships and become leaders in community development related to the social justice issue of sexual misconduct with emphasis on the college campus environment.

0101	Carly Cottone	Seats (Total: 15)
	MW 5:00pm - 6:00pm	JMZ 1124
	Contact instructor or department for details.	
	Contact department or instructor for details.	

PEER338 PEER LEADERSHIP AND EDUCATION

(Perm req)

Credits: 3 Grading Method: Regular

An interdisciplinary independent study designed to enhance the scope of learning around UHC peer education topics and train students to serve as leaders for those enrolled in first year peer courses, PEER31X and PEER32X. Second year peers are trained to facilitate intersectional and advanced health education dialogue, as well as serve in leadership roles for the course in which they were previously enrolled, PEER31X and PEER32X. Additionally, Peer Leader responsibilities include creating and implementing campus wide events to promote learning around the intersections between UHC peer education group topics (power-based violence, sexual health, alcohol and other drugs, stress and mental health). Peer Leaders will have different responsibilities based on the programmatic needs and goals of the semester.

0101	Jaclyn Webber, Jenna Messman, Rajan Parikh, Sarah Wilson	Seats (Total: 7)
	M 5:15pm - 6:45pm	Location: TBA
	W 5:15pm - 6:15pm	Location: TBA

PERS101 Elementary Persian I

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be native/fluent speaker of Persian.

Introduction to the alphabet, pronunciation patterns, greetings, basic structures, and other fundamentals, with emphasis on oral and aural skills.

0101	Bahareh Jalehmahmoudi	Seats (Total: 15)	
	MTuWF 10:00am - 10:50am	HJP 2114	
	Th 10:00am - 10:50am	HJP 2114	Lab

PERS283 Iranian Cinema

Credits: 3 Grading Method: Regular, General Education: DSHU
Pass-Fail, Audit

Cross-listed with: FILM298B. Credit only granted for: PERS283 or FILM298B.

Introduction to Iranian cinema, society, and culture. Taught in English.

Cross-listed with FILM298B. Credit granted for PERS283, FILM283, or FILM298B.

0101	Matthew Miller	Seats (Total: 30)	
	MW 3:30pm - 4:45pm	JMZ 1122	

PERS299 Directed Study in Persian Language

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Directed study in Persian. Taught in Persian.

2950	Manizhe Galledari	Seats (Total: 5)	
	Contact instructor or department for details.		

PERS301 Advanced Persian I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PERS202; or permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Must not be native/fluent speaker of Persian.

Development of speaking, reading, writing, listening and cultural knowledge through wide variety of activities, especially reading.

0101	Manizhe Galledari	Seats (Total: 15)
	MWF 1:00pm - 1:50pm	HJP 2114

PERS311**Persian Media**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PERS301; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Examines issues, values, institutions of the contemporary Persian and Persianate world, primarily through analysis and discussion of current events as reported in the written and audiovisual press. Focus will be on increasing content knowledge as well as linguistic competency in Persian. Taught in Persian.

0101	Nahal Akbari-Saneh	Seats (Total: 10)
	MWF 12:00pm - 12:50pm	HJP 2114

PERS398G**Special Topics in Persian Studies; Readings in Contemporary Iranian History**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topic to be announced when course is offered. Taught in Persian.

Blending content and advanced language acquisition, the course examines a range of issues related to the contemporary history of Iran, particularly leading to and after the Islamic Revolution. The primary focus is on developing Superior proficiency in the language and culture. Taught in Persian.

0101	Bahareh Jalehmahmoudi	Seats (Total: 10)
	TuTh 11:00am - 12:15pm	HJP 3115

PERS398Q**Special Topics in Persian Studies; Social Issues in Contemporary Iran**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topic to be announced when course is offered. Taught in Persian.

Permission required. Taught in Persian. Blending content and advanced language acquisition, the course examines a range of issues of social significance in today's Iran from multiple perspectives. The primary focus is on developing Superior proficiency in the language and culture.

0101	Ali Abasi	Seats (Total: 10)
	F 9:00am - 11:45am	HJP 3115

PERS398R Special Topics in Persian Studies; Persian for Professional Purposes

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topic to be announced when course is offered. Taught in Persian.

Taught in Persian.

0101	Manizhe Galledari	Seats (Total: 10)
	TuTh 9:00am - 10:30am	HJP 3115

PERS399 Directed Study in Persian

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Directed study with faculty supervision.

Contact department for information to register for this course.

PERS399C Directed Study in Persian; Living/Learning in Persian House

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Directed study with faculty supervision.

Prerequisite: Permission of department. Taught in Persian.

0101	Manizhe Galledari	Seats (Total: 5)
	Contact instructor or department for details.	

PERS399D Directed Study in Persian; Capstone Research Project

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Directed study with faculty supervision.

Permission required. Taught in Persian.

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO General Education: DSHU

An introduction to the literature, problems, and methods of philosophy either through a study of some of the main figures in philosophic thought or through an examination of some of the central and recurring problems of philosophy.

0101	Dan Moller	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	MMH 1400	
	F 1:00pm - 1:50pm	KEY 0125	Discussion
0102	Dan Moller	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	MMH 1400	
	F 11:00am - 11:50am	MTH 0104	Discussion
0103	Dan Moller	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	MMH 1400	
	F 10:00am - 10:50am	PHY 0405	Discussion
0104	Dan Moller	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	MMH 1400	
	F 1:00pm - 1:50pm	HBK 0105	Discussion
0105	Dan Moller	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	MMH 1400	
	F 11:00am - 11:50am	HBK 0103	Discussion
0106	Dan Moller	Seats (Total: 24)	
	TuTh 11:00am - 11:50am	MMH 1400	
	F 10:00am - 10:50am	HBK 0103	Discussion
FC01	Daniel Blair	Seats (Total: 28)	
	TuTh 6:00pm - 7:15pm	KEY 0126	
	<i>Restricted to students in Freshmen Connection.</i>		

PHIL140

Contemporary Moral Issues

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO General Education: DSHU

The uses of philosophical analysis in thinking clearly about such widely debated moral issues as abortion, euthanasia, homosexuality, pornography, reverse discrimination, the death penalty, business ethics, sexual equality, and economic justice.

0101	Aylon Manor TuTh 9:30am - 10:20am F 10:00am - 10:50am	Seats (Total: 24) SKN 0200 MTH 0411	Discussion
0102	Aylon Manor TuTh 9:30am - 10:20am F 12:00pm - 12:50pm	Seats (Total: 24) SKN 0200 SQH 1107	Discussion
0103	Aylon Manor TuTh 9:30am - 10:20am F 1:00pm - 1:50pm	Seats (Total: 24) SKN 0200 TLF 1101	Discussion
0201	Hallie Liberto MW 12:00pm - 12:50pm F 10:00am - 10:50am	Seats (Total: 24) JMZ 0220 ASY 3203	Discussion
0202	Hallie Liberto MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 24) JMZ 0220 ASY 3221	Discussion
0203	Hallie Liberto MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 24) JMZ 0220 SKN 0104	Discussion
0204	Hallie Liberto MW 12:00pm - 12:50pm F 10:00am - 10:50am	Seats (Total: 24) JMZ 0220 HBK 1108	Discussion
0205	Hallie Liberto MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 24) JMZ 0220 MTH 0403	Discussion
0206	Hallie Liberto MW 12:00pm - 12:50pm F 1:00pm - 1:50pm	Seats (Total: 24) JMZ 0220 JMZ 2123	Discussion
FC01	Cindy Phillips MW 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 28) PLS 1113	

FC02	Dimiter Kirilov TuTh 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 28) PHY 4221
FC03	Dimiter Kirilov TuTh 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 28) PHY 4221
FC04	Daniel Blair MW 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 28) HBK 0109
FC05	Charles Barclay MW 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 28) PLS 1113

PHIL170

Introduction to Logic

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: MS General Education: FSAR

Development of analytical reasoning skills through study of formal logics, reasoning systems, and fallacious inference patterns.

0101	Casey Enos MW 11:00am - 11:50am Th 9:30am - 10:20am	Seats (Total: 25) KEY 0106 JMZ 0103	Discussion
0102	Casey Enos MW 11:00am - 11:50am Th 11:00am - 11:50am	Seats (Total: 25) KEY 0106 JMZ 0125	Discussion
0103	Casey Enos MW 11:00am - 11:50am Th 12:30pm - 1:20pm	Seats (Total: 25) KEY 0106 ITV 1100	Discussion
0104	Casey Enos MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 25) KEY 0106 TWS 1107	Discussion

0105	Casey Enos MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 25) KEY 0106 SQH 2120	Discussion
0106	Casey Enos MW 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 25) KEY 0106 SQH 1123	Discussion
0107	Casey Enos MW 11:00am - 11:50am F 10:00am - 10:50am	Seats (Total: 25) KEY 0106 EGR 3114	Discussion
0108	Casey Enos MW 11:00am - 11:50am F 12:00pm - 12:50pm	Seats (Total: 25) KEY 0106 LEF 2166	Discussion
0109	Casey Enos MW 11:00am - 11:50am F 1:00pm - 1:50pm	Seats (Total: 25) KEY 0106 JMZ 1120	Discussion

PHIL201

Spooky Action at a Distance? Where Physics Meets Metaphysics

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO General Education: DSHU, SCIS

Recommended: Students should be comfortable with moderately mathematical presentations. Placement into MATH110 or higher is strongly recommended. Credit only granted for: PHIL201 or PHIL209I. Formerly: PHIL209I.

Einstein believed that physics should represent a "reality in space and time, free from spooky action at a distance." He worried that quantum theory failed this test. Later developments suggest that quantum systems really can influence one another instantly, no matter how far apart they are, but the question remains controversial and experiments are not sufficient to provide an answer. This self-contained course will draw on philosophy and physics to investigate the controversy.

0101	Allen Stairs MW 3:00pm - 3:50pm Class time/details on ELMs	Seats (Total: 25) TYD 2109 ONLINE	Discussion
0102	Allen Stairs MW 3:00pm - 3:50pm Class time/details on ELMs	Seats (Total: 25) TYD 2109 ONLINE	Discussion

0103	Allen Stairs MW 3:00pm - 3:50pm Class time/details on ELMs	Seats (Total: 25) TYD 2109 ONLINE	Discussion
FCB1	Allen Stairs Tu 3:00pm - 4:15pm Class time/details on ELMs	Seats (Total: 24) TYD 1118 ONLINE	Discussion
<i>Restricted to students in Freshman Connection.</i>			

PHIL202

Know Thyself: Wisdom Through Cognitive Science

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, DSHU, SCIS

Credit only granted for: PHIL209N or PHIL202. Formerly: PHIL209N.

How do we improve our decision making? Cognitive science demonstrates that self-knowledge isn't as easy as we think, and that there are numerous biases and fallacies that impact our decision-making in ways that are hard for us to be aware of. In this course you will learn what some of these are and how they have been discovered, and you will explore potential strategies for avoiding these fallacies and for making wiser choices.

0101	Peter Carruthers MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 25) KEY 0106 SQH 1121	Discussion
0102	Peter Carruthers MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 25) KEY 0106 SQH 1105	Discussion
0103	Peter Carruthers MW 1:00pm - 1:50pm F 1:00pm - 1:50pm	Seats (Total: 25) KEY 0106 SQH 1103	Discussion
0104	Peter Carruthers MW 1:00pm - 1:50pm F 10:00am - 10:50am	Seats (Total: 25) KEY 0106 TYD 2110	Discussion
0105	Peter Carruthers MW 1:00pm - 1:50pm F 11:00am - 11:50am	Seats (Total: 25) KEY 0106 SQH 1121	Discussion

0106	Peter Carruthers	Seats (Total: 25)	
	MW 1:00pm - 1:50pm	KEY 0106	
	F 1:00pm - 1:50pm	HBK 0123	Discussion

PHIL203 The Rights and Wrongs of Killing People

Credits: 3 Grading Method: Regular, General Education: DSHU,
 Pass-Fail, Audit SCIS

Credit only granted for: PHIL209J or PHIL203. Formerly: PHIL209J.

Virtually everyone thinks it's permissible to kill people only in special circumstances. But why is killing usually wrong? Is it ever acceptable to kill an innocent human being intentionally? This course raises these and related questions and examines cases such as terrorism, suicide, abortion, euthanasia, the death penalty, war. Except for a brief discussion of animals, all the controversies considered deal with killing and causing death to human beings.

0101	Sungwon Woo	Seats (Total: 25)	
	TuTh 3:30pm - 4:20pm	ESJ 2208	
	F 10:00am - 10:50am	JMP 1202	Discussion
0102	Sungwon Woo	Seats (Total: 25)	
	TuTh 3:30pm - 4:20pm	ESJ 2208	
	F 11:00am - 11:50am	JMP 2202	Discussion
0103	Sungwon Woo	Seats (Total: 25)	
	TuTh 3:30pm - 4:20pm	ESJ 2208	
	F 1:00pm - 1:50pm	JMP 1109	Discussion
0104	Sungwon Woo	Seats (Total: 25)	
	TuTh 3:30pm - 4:20pm	ESJ 2208	
	F 10:00am - 10:50am	PLS 1113	Discussion
0105	Sungwon Woo	Seats (Total: 25)	
	TuTh 3:30pm - 4:20pm	ESJ 2208	
	F 11:00am - 11:50am	SQH 1107	Discussion
0106	Sungwon Woo	Seats (Total: 25)	
	TuTh 3:30pm - 4:20pm	ESJ 2208	
	F 1:00pm - 1:50pm	SQH 1105	Discussion

PHIL220 Bioethics: Regulating Right and Wrong

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	General Education: DSHU, DSSP
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Credit only granted for: PHIL209A or PHIL220. Formerly: PHIL209A.

Bioethicists formulate ethical guidelines. They answer questions such as: When life-saving health resources are scarce, who should get them? Should we increase supply of one such resource, kidneys, by buying them from living "donors"? If drug trials in developing countries benefit patients who consent to participate, are the trials ethical, even if the same research would be forbidden in the US? If a sick person aims to hasten her death, how, if at all, might her doctor permissibly help her? In this course, students construct and defend ethical rules in four domains: research ethics, allocation of scarce resources, markets in organs, and physician-assisted dying.

0101	Aida Roige Mas	Seats (Total: 25)	
	MW 10:00am - 10:50am	TYD 2106	
	F 10:00am - 10:50am	SQH 1105	Discussion
0102	Aida Roige Mas	Seats (Total: 25)	
	MW 10:00am - 10:50am	TYD 2106	
	F 12:00pm - 12:50pm	EDU 1315	Discussion
0103	Aida Roige Mas	Seats (Total: 25)	
	MW 10:00am - 10:50am	TYD 2106	
	F 1:00pm - 1:50pm	EDU 1315	Discussion

PHIL236

Philosophy of Religion

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HO	General Education: DSHU
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Cross-listed with RELS236. Credit only granted for: PHIL236 or RELS236.

A philosophical study of some of the main problems of religious thought: the nature of religious experience, the justification of religious belief, the conflicting claims of religion and science, and the relation between religion and morality.

0101	Adam Jurkiewicz	Seats (Total: 24)	
	MW 9:00am - 9:50am	TYD 2106	
	F 10:00am - 10:50am	HBK 0109	Discussion
0102	Adam Jurkiewicz	Seats (Total: 24)	
	MW 9:00am - 9:50am	TYD 2106	
	F 12:00pm - 12:50pm	JMZ 2123	Discussion

0103	Adam Jurkiewicz	Seats (Total: 24)	
	MW 9:00am - 9:50am	TYD 2106	
	F 1:00pm - 1:50pm	MTH 0401	Discussion

PHIL245 Political and Social Philosophy I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: HO General Education: DSHU

A critical examination of such classical political theories as those of Plato, Hobbes, Locke, Rousseau, Mill, Marx, and such contemporary theories as those of Hayek, Rawls, and recent Marxist thinkers.

0101	Christopher Morris	Seats (Total: 21)	
	TuTh 3:30pm - 4:20pm	LEF 2166	
	F 10:00am - 10:50am	EDU 1107	Discussion
0102	Christopher Morris	Seats (Total: 21)	
	TuTh 3:30pm - 4:20pm	LEF 2166	
	F 11:00am - 11:50am	EDU 1315	Discussion
0103	Christopher Morris	Seats (Total: 21)	
	TuTh 3:30pm - 4:20pm	LEF 2166	
	F 1:00pm - 1:50pm	MTH 0405	Discussion

PHIL269M Special Topics in Study Abroad II; Moral Philosophy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

PHIL269Y Special Topics in Study Abroad II; Truth & Reality

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

PHIL308T Studies in Contemporary Philosophy; A Philosopher's Toolkit

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Problems, issues, and points of view of current interest in philosophy.

An examination of how formal logic captures (and sometimes defies) logical intuitions, and how it supplies useful tools for clarifying a range of different philosophical problems, from issues of meaning, to issues of ontology and scientific reduction. NOTE: this course presupposes that you have already had some exposure to formal logic.

0101	Georges Rey	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	CHE 2145

PHIL308W Studies in Contemporary Philosophy; World Philosophy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Problems, issues, and points of view of current interest in philosophy.

Cross-listed with RELS319W. Credit granted for PHIL308W or RELS319W.

0101	James Maffie	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	SQH 1121

PHIL308X Studies in Contemporary Philosophy; Philosophy and Time Travel

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Problems, issues, and points of view of current interest in philosophy.

Examines the philosophical issues surrounding the paradoxes of time travel. Several solutions are considered, ranging from classical consistency conditions to multiverse theories. Materials include works of philosophy and physics, and time travel narratives from science fiction short stories and movies.

SG91	Lucas Dunlap	Seats (Total: 40)
	Class time/details on ELMs	ONLINE
<i>Registration is restricted to Biological Sciences-Shady Grove majors. Permission is required for all other students to enroll in courses at Shady Grove. Please email usgbiosci@umd.edu for permission.</i>		

PHIL309A Philosophical Problems; Art, Imagination, & Emotion

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A focused study of a contemporary philosophical problem or issue. Topics will vary, but the course will encourage students to generate critical analyses or proposed resolutions of issues in the contemporary philosophical literature.

0101	Heather Adair	Seats (Total: 30)
	Class time/details on ELMs	ONLINE
0201	Heather Adair	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

PHIL309P

Philosophical Problems; Philosophy Politics and Economics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

A focused study of a contemporary philosophical problem or issue. Topics will vary, but the course will encourage students to generate critical analyses or proposed resolutions of issues in the contemporary philosophical literature.

0101	Eric Pacuit	Seats (Total: 30)
	TuTh 2:00pm - 2:50pm	HBK 0109
	Class time/details on ELMs	ONLINE

PHIL310

Ancient Philosophy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed 6 credits in philosophy or classics.

A study of the origins and development of philosophy and science in ancient Greece, focusing on the pre-Socratics, Socrates, Plato, and Aristotle.

0101	Michael McCourt	Seats (Total: 25)
	MW 11:00am - 11:50am	SQH 1120
	F 10:00am - 10:50am	LEF 1220 Discussion
0102	Michael McCourt	Seats (Total: 25)
	MW 11:00am - 11:50am	SQH 1120
	F 12:00pm - 12:50pm	WDS 1114 Discussion
0103	Michael McCourt	Seats (Total: 25)
	MW 11:00am - 11:50am	SQH 1120
	F 1:00pm - 1:50pm	WDS 1114 Discussion

PHIL332**Philosophy of Beauty**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit*Prerequisite: 3 courses in PHIL; or permission of ARHU-Philosophy department.**Philosophical theories, historical and contemporary, of beauty, sublimity, and other aesthetic qualities, of aesthetic experience, and of aesthetic judgment.*

0101	John Brown	Seats (Total: 30)
	MW 2:00pm - 3:15pm	SKN 1115

PHIL338D**Studies in Value Theory; The Ethics of Sex**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit*Problems, issues and points of view in ethics, aesthetics, political philosophy and related areas.*

Credit only granted for PHIL338D or (PHIL309S in Summer 2016). Questions of sexual morality often deal with emotionally-fraught decisions and real-world problems. This course will appeal to ethical theory to help us think carefully about the issues. We will also use films to provide a common ground for discussions. Topics include monogamy, cheating, open relationships, consent, sex & love, BDSM, pornography, prostitution, bestiality, and pedophilia.

0101	Shen Pan	Seats (Total: 30)
	MW 3:00pm - 4:15pm	ASY 3207

PHIL341**Ethical Theory**

Credits: 3

Grading Method: Regular

*Prerequisite: 6 credits in PHIL courses.**A critical examination of classical and contemporary systems of ethics, such as those of Aristotle, Kant, Mill, and Rawls.**Prerequisite: 6 credit hours in philosophy.*

0101	Patricia Greenspan	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	SQH 1107

PHIL344**Philosophy of Race**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

General Education: DVUP

Credit only granted for: PHIL344 or PHIL308Y. Formerly: PHIL308Y.

A survey of philosophical arguments involving race and racism. Guiding questions will include: How have philosophers and scientists conceived of the concept of race? Is race a coherent concept? Does it help us explain differences in performance and behavior? What makes racism, racial prejudice, and discrimination wrong? What is the point of equality? Do we owe reparations to victims of racism?

0101	Sungwon Woo	Seats (Total: 30)
	Class time/details on ELMs	ONLINE

PHIL366 Philosophy of Mind

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 6 credits in PHIL courses.

An introduction to core issues in the philosophy of mind, focusing especially on the basic metaphysical question of dualism versus physicalism.

0101	Georges Rey	Seats (Total: 30)
	TuTh 5:00pm - 6:15pm	SKN 1115

PHIL370 Symbolic Logic

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHIL170 or CMSC250; or permission of ARHU-Philosophy department.

A review of propositional and predicate logic and related topics and an introduction to the semantics and metatheory of first-order logic.

0101	Eric Pacuit	Seats (Total: 25)
	MW 4:00pm - 5:15pm	JMZ 0118

PHIL386 Experiential Learning

(Perm req)

Credits: 6 Grading Method: Regular,
Pass-Fail

Restriction: Permission of ARHU-Philosophy department; and junior standing or higher.

Consult Director of Undergraduate Studies: C. Manekin. Prerequisites: 12 credit hours of philosophy and 3.0 GPA. Carries no credit toward philosophy major.

Contact department for information to register for this course.

PHIL412 The Philosophy of Plato

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 6 credits in PHIL courses.

A critical study of selected dialogues.

0101	Quinn Harr	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

PHIL418D Topics in Epistemology/Metaphysics; Causes and Correlations in the Physical World

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An intensive examination of contemporary problems and issues in epistemology or metaphysics. Source material will be selected from recent books and articles.

0101	Michael Dascal	Seats (Total: 25)
	Class time/details on ELMs	ONLINE

PHIL418L Topics in Epistemology/Metaphysics; Innate Knowledge

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An intensive examination of contemporary problems and issues in epistemology or metaphysics. Source material will be selected from recent books and articles.

Examines ideas about what we can perceive, conceptualize, or know, just in virtue of our nature, concerning mathematics, physics, language, or morality, among other areas. Readings include Plato, Descartes, Locke, Leibniz, Kant, Chomsky, and several contemporary authors.

0101	Alexander Williams	Seats (Total: 25)
	TuTh 9:30am - 10:45am	SQH 2120

PHIL428N Topics in the History of Philosophy; The Aztecs: Human Sacrifice and Conquest

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with HIST429N, LASC448J, and RELS419J. Credit only grantedN . for HIST429N, PHIL428N, LASC448J, or RELS419J.

0101	James Maffie	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	KEY 0116

PHIL438B **Topics in Value Theory; Nationalism and Identity**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An intensive examination of contemporary problems and issues in ethics, aesthetics, political philosophy and related areas. Source material will be selected from recent books and articles.

0101	Christopher Morris	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	SQH 1123

PHIL469Y **Study Abroad Special Topics IV; Philosophy of Science II**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

PHIL498F **Topical Investigations; Topical Investigation**

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite:Two courses in philosophy or permission of the department.

Contact department for information to register for this course.

PHIL498G **Topical Investigations; Topical Investigation**

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite:Two courses in philosophy or permission of the department.

Contact department for information to register for this course.

PHIL640 **Value Theory**

Credits: 3 Grading Method: Regular,
Audit

A basic course in value theory for beginning graduate students, covering a number of topics in depth, to provide a springboard for further study and research in the area.

0101	Patricia Greenspan	Seats (Total: 15)
	Th 3:30pm - 6:00pm	SKN 1116

PHIL688T Selected Problems in Philosophy; Introduction to Semantics

Credits: 3 Grading Method: Regular,
 Audit

Cross-listed with LING660. Credit granted for LING660 or PHIL688T.

0101	Alexander Williams	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	MMH 1108B

PHIL788G Research in Philosophy; Research in Philosophy

(Perm req)

Credits: 1-6 Grading Method: Regular,
 Audit

Contact department for information to register for this course.

PHIL788I Research in Philosophy; Research in Philosophy

(Perm req)

Credits: 1-6 Grading Method: Regular,
 Audit

Contact department for information to register for this course.

PHIL799 Master's Thesis Research; Masters Thesis Research

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

PHIL808I Seminar in the Problems of Philosophy

Credits: 3 Grading Method: Regular,
 Audit

0101	Brian Kogelmann	Seats (Total: 15)
	Tu 3:30pm - 6:00pm	SKN 1116

PHIL808K Seminar in the Problems of Philosophy; Counterfactuals

Credits: 3 Grading Method: Regular,
 Audit

0101	Paolo Santorio	Seats (Total: 15)
	M 4:45pm - 7:15pm	SKN 1116

PHIL848L Seminar in Ethics

Credits: 3 Grading Method: Regular,
Audit

0101	Hallie Liberto	Seats (Total: 15)
	M 2:00pm - 4:30pm	SKN 1116

PHIL878A Seminar in Cognitive Studies

Credits: 3-9 Grading Method: Regular,
Audit

Methodology and research in various disciplines involved in cognitive studies.

0101	Peter Carruthers	Seats (Total: 15)
	W 3:00pm - 5:30pm	SKN 1116

PHIL888 Professional Mentoring for Doctoral Students

Credits: 1-3 Grading Method: Sat-Fail

Work with a faculty advisor on various aspects of professional development.

Contact department for information to register for this course.

PHIL889 Pedagogical Mentoring for Doctoral Students

(Perm req)

Credits: 1-3 Grading Method: Sat-Fail

Work with a faculty advisor to develop and improve pedagogical skills.

Contact department for information to register for this course.

PHIL898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

PHIL899 Doctoral Dissertation Research; Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

PHSC300**Foundations of Public Health**

Credits: 3

Grading Method: Regular

Restriction: Must be a major within the School of Public Health. Credit only granted for: SPHL100 or PHSC300.

An overview of the goals, functions, and methods of public health. After an introduction to the core concepts and tools used in public health research and practice, applications of these methodologies are considered in the context of current controversies/problems in public health. Students work together to develop strategies for prevention and control that take into consideration different points of view, outside research, and impacts on individuals and communities.

ESG1

Chandria Jones

Seats (Total: 35)

Th 5:00pm - 7:30pm

BLD3 2226

Restricted to Shady Grove students in the Public Health Sciences major.

PHSC389**Independent Research Study in Public Health Science**

(Perm req)

Credits: 1-6

Grading Method: Regular

This independent research-based experience will provide the opportunity for students to work with individual research mentors in the area of Public Health Science. Students must identify a mentor prior to obtaining departmental permission.

0101

Nancy Smith

Seats (Total: 30)

Contact instructor or department for details.

PHSC399**Public Health Science Internship**

(Perm req)

Credits: 1-6

Grading Method: Regular

The Public Health Science internship will enable students to gain practical experience under conditions conducive to academic, research and professional development. The internship is a time-limited, supervised period of public health professional experience carried out in a related professional organization or research setting.

0101

Nancy Smith

Seats (Total: 30)

Contact instructor or department for details.

ESG1

Nancy Smith

Seats (Total: 20)

Contact instructor or department for details.

Restricted to Shady Grove students in the Public Health Sciences major.

PHSC401**History of Public Health**

Credits: 3 Grading Method: Regular

Restriction: Must be in Public Health Science program; and must have earned a minimum of 45 credits. Credit only granted for: PHSC401 or SPHL401. Formerly: SPHL401.

Emphasis is on the history of public health in the Western world from antiquity to the present. Also examines the influence of public health developments as they relate to the Western world as well as throughout diverse cultures and societies across the globe. Analysis focuses on the interaction among Western and non-Western cultures with respect to health issues, including science, policies, prevention and treatment.

0101	Marian Jones	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	BPS 0283

PHSC410**Public Health Program Planning and Evaluation**

Credits: 3 Grading Method: Regular

Restriction: Must be in Public Health Science program; and junior standing or higher. Credit only granted for: PHSC410 or SPHL410. Formerly: SPHL410.

Students will become familiar with the dynamics of public health program planning, and the basic process of identifying unmet needs. They will be able to identify different types of program evaluation, including needs assessment, formative research, process evaluation, impact assessment, and cost analysis.

ESG1	Nancy Smith	Seats (Total: 35)
	Th 2:00pm - 4:30pm	BLD3 2226
	<i>Restricted to Shady Grove students in the Public Health Sciences major.</i>	

PHSC412**Food, Policy, and Public Health**

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed HLSA300 with a C- or higher. Recommended: NFSC100.

Restriction: Must be in Public Health Science program; and junior standing or higher. Credit only granted for: PHSC412 or SPHL412. Formerly: SPHL412.

Broad overview of the impact of food and food policy on public health. Course covers topics such as access to food, food systems, influence of food policies on the individual, the cost of food, influences on food selection, food safety risks and responses, nutrition-related health challenges, and a comparison of US food/nutrition issues with those of other nations.

0101	Christopher Waldrop	Seats (Total: 35)
	W 5:00pm - 7:30pm	PLS 1117

PHSC415

Essentials of Public Health Biology: The Cell, The Individual, and Disease

Credits: 3

Grading Method: Regular

Prerequisite: Minimum grade of C- in BSCI202. Recommended: BSCI223. Restriction: Must be in Public Health Science program; and junior standing or higher. Credit only granted for: PHSC415, SPHL415 or SPHL498J. Formerly: SPHL415 and SPHL498J.

Presents the basic scientific and biomedical concepts of modern public health problems and explores in depth mechanisms and models of the major categories of disease. The biologic principles presented are foundations to public health disease prevention, control, or management programs.

0101	Jessica O'Hara	Seats (Total: 19)
	MW 1:00pm - 1:50pm	ESJ 2204
	W 2:00pm - 2:50pm	SPH 0121 Discussion
0102	Jessica O'Hara	Seats (Total: 19)
	MW 1:00pm - 1:50pm	ESJ 2204
	W 3:00pm - 3:50pm	SPH 0121 Discussion
0103	Jessica O'Hara	Seats (Total: 19)
	MW 1:00pm - 1:50pm	ESJ 2204
	W 4:00pm - 4:50pm	SPH 0121 Discussion
0104	Jessica O'Hara	Seats (Total: 19)
	MW 1:00pm - 1:50pm	ESJ 2204
	Th 9:30am - 10:20am	SPH 0116A Discussion
0105	Jessica O'Hara	Seats (Total: 19)
	MW 1:00pm - 1:50pm	ESJ 2204
	Th 11:00am - 11:50am	SPH 0116A Discussion
0106	Jessica O'Hara	Seats (Total: 19)
	MW 1:00pm - 1:50pm	ESJ 2204
	Th 12:30pm - 1:20pm	SPH 0116A Discussion
0107	Jessica O'Hara	Seats (Total: 19)
	MW 1:00pm - 1:50pm	ESJ 2204
	Th 2:00pm - 2:50pm	SPH 0116A Discussion

0108	Jessica O'Hara	Seats (Total: 19)	
	MW 1:00pm - 1:50pm	ESJ 2204	
	Th 3:30pm - 4:20pm	SPH 0116A	Discussion
ESG1	Mark Scheckelhoff	Seats (Total: 35)	
	M 5:00pm - 7:30pm	BLD3 2225	
<i>Restricted to Shady Grove students in the Public Health Sciences major. Permission of program director is required for other UMCP undergraduate students to enroll.</i>			

PHSC430

Public Health in the City: Perspectives on Health in the Urban Environment

Credits: 3

Grading Method: Regular

General Education: DSHS,
DVUP, SCIS

Prerequisite: Minimum grade of C- in BSCI202 and MIEH300. Restriction: Must be in Public Health Science program; and junior standing or higher. Credit only granted for: PHSC430 or SPHL498G. Formerly: SPHL498G.

Exposure to issues related to city habitation and the health of the public, including how the urban environment impacts the lives and health of city dwellers, including discussion of the social determinants of health. Students are encouraged to think about urban health and policy, and to question the current state of urban public health. Issues of race, class, and equality will be discussed throughout the course as they relate to each of these topics.

0101	Alyssa Brooks	Seats (Total: 35)	
	M 5:00pm - 7:30pm	Location: TBA	
	Class time/details on ELMs	ONLINE	
<i>Class will meet in SPH 0307 on the following dates: 8/26, 9/9, 9/23, 10/7, 10/21, 11/4, 11/18, 12/2.</i>			
ESG1	Alyssa Brooks	Seats (Total: 35)	
	Tu 5:00pm - 7:30pm	BLD3 3206	
	Class time/details on ELMs	ONLINE	
<i>Restricted to Shady Grove students in the Public Health Sciences major. Class will meet in-person on the following dates: 8/27, 9/10, 9/24, 10/8, 10/22, 11/5, 11/19, 12/3.</i>			

PHSC440

Public Health Nutrition

Credits: 3

Grading Method: Regular

Prerequisite: A minimum of C- in BSCI170, BSCI171, CHEM131, CHEM132 and EPIB301. Restriction: Must be in Public Health Science program. Credit only granted for: PHSC440 or NFSC498L.

Engages students in conceptual thinking about the relationship between public health and nutritional health. Students will analyze and interpret "A Framework for Public Health Nutrition." Students will identify determinants of nutritional health, assess nutritional health in individuals and populations, develop strategies to mitigate these issues, and analyze and evaluate public health nutrition policies.

0101	Kendall Bustad	Seats (Total: 35)
	Class time/details on ELMs	ONLINE

PHSC497

Public Health Science Capstone

Credits: 3

Grading Method: Regular

General Education: DSSP

Prerequisite: Must have completed the professional writing requirement with a C- or higher; and minimum grade of C- in MIEH400. Restriction: Must have earned a minimum of 100 credits; and must be in Public Health Science program; and must be in the final semester of undergraduate study. Credit only granted for: SPHL498F or PHSC497. Formerly: SPHL498F.

The capstone course is the culminating experience for Public Health Science students and must be taken only in the final semester of study. The Public Health Science capstone course is designed to challenge students to integrate the five core areas of public health in investigating, researching and addressing public health issues. Throughout the semester, students will be required to evaluate, analyze and synthesize scholarly works as they research and propose solutions to a variety of public health issues. By the conclusion of this research based course, students will understand how the various public health perspectives can combine in addressing and informing public health practices.

0101	Kendall Bustad	Seats (Total: 20)
	M 4:00pm - 6:30pm	SPH 0116B
0301	Kevin Glasz	Seats (Total: 20)
	Tu 4:00pm - 6:30pm	SPH 0116B
0601	Ellesse-Roselee Akre	Seats (Total: 20)
	W 6:00pm - 8:30pm	SPH 0116B
0701	Eric Boyle	Seats (Total: 20)
	Th 5:00pm - 7:30pm	SPH 0116B
ESG1	Jennifer Hodgson	Seats (Total: 20)
	W 10:30am - 1:00pm	BLD3 4219
<i>Restricted to Shady Grove students in the Public Health Sciences major.</i>		

PHYS

Physics

Fall 2019

PHYS102

Physics of Music

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	General Education: DSNL (if taken with PHYS103)
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Prerequisite: Must have math eligibility of MATH107 or higher. Credit only granted for: PHYS102 and PHYS499C. Additional information: CORE Distributive Studies Physical Sciences Laboratory Course only when taken concurrently with PHYS103.

A study of the physical basis of sound, acoustical properties of sound, the human ear and voice, reproduction of sound, electronic music, acoustical properties of auditoriums, and other selected topics.

0101	Matt Severson	Seats (Total: 150)
	TuTh 9:30am - 10:45am	PHY 1410

PHYS103

Physics of Music Laboratory

Credits: 1	Grading Method: Regular, Pass-Fail, Audit
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Optional laboratory to accompany PHYS 102. Laboratory experiments, including the velocity of sound, sound quality and wave shape, traveling and standing waves, fourier synthesis and analysis, musical synthesizer, psychoacoustics, and audio equipment.

0101	Andris Skuja	Seats (Total: 22)	
	Th 11:00am - 12:50pm	PHY 3220	Lab
0301	Andris Skuja	Seats (Total: 22)	
	Th 3:30pm - 5:20pm	PHY 3220	Lab
0401	Andris Skuja	Seats (Total: 22)	
	F 10:00am - 11:50am	PHY 3220	Lab
	<i>Recommended for First-Year students.</i>		
0501	Andris Skuja	Seats (Total: 22)	
	F 12:00pm - 1:50pm	PHY 3220	Lab
0601	Andris Skuja	Seats (Total: 22)	
	F 2:00pm - 3:50pm	PHY 3220	Lab
0701	Andris Skuja	Seats (Total: 22)	
	W 3:00pm - 5:00pm	PHY 3220	Lab
0801	Andris Skuja	Seats (Total: 22)	
	W 1:00pm - 2:50pm	PHY 3220	Lab

PHYS105**A Global Challenge: Energy and Climate Change**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: PS

General Education: DSNS,
SCIS

This marquee course will consider the global energy crisis from a scientific perspective. Topics include basic laws of energy and thermodynamics, their effects on energy production and distribution, greenhouse gas, global warming and policy options for decision makers. This course is aimed at the non-science major.

0102	Steven Rolston	Seats (Total: 30)		
	TuTh 12:30pm - 1:45pm	PHY 1201		
	M 1:00pm - 1:50pm	PHY 0405	Discussion	
0104	Steven Rolston	Seats (Total: 30)		
	TuTh 12:30pm - 1:45pm	PHY 1201		
	F 12:00pm - 12:50pm	PHY 1219	Discussion	

PHYS111**Physics in the Modern World**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: PS

A survey course in general physics emphasizing the role that physics plays in science, technology, and society today. The course is concept oriented and minimal use of mathematics is made. Intended for the general student; does not satisfy the requirements of the professional schools.

Contact department for information to register for this course.

PHYS115**Inquiry into Physics**

Credits: 4

Grading Method: Regular,
Pass-Fail, Audit

CORE: PL

General Education: DSNL

Recommended: High School Physics. Restriction: Must not have completed PHYS117; and must be in one of the following programs (Elementary Education; Early Childhood Education; Middle School Education). Credit only granted for: PHYS115 or PHYS117.

Intended for students majoring in neither the physical nor the biological sciences. Use of laboratory-based and inquiry-based methods to study some of the basic ideas of physical sciences.

0101	Linda Hembeck	Seats (Total: 20)		
	MWF 1:00pm - 2:50pm	PHY 3316	Lab	
0201	Arpita Upadhyaya	Seats (Total: 20)		
	MWF 9:00am - 10:50am	PHY 3316	Lab	

PHYS121**Fundamentals of Physics I**

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: PL General Education: DSNL

Prerequisite: MATH112 or MATH115. Credit only granted for: PHYS121, PHYS131, or PHYS331.

The first part of a two-semester course in general physics treating the fields of mechanics, heat, sound, electricity, magnetism, optics, and modern physics. Together with PHYS122, this generally satisfies the minimum requirement of medical and dental schools.

Physics clinic, PHY 1214, MTWHF 11,1. If purchasing used books additional software may be required. Students must pay a \$50.00 laboratory materials fee.

0201	Matt Severson	Seats (Total: 28)		
	MWF 12:00pm - 12:50pm	PHY 1412		
	M 10:00am - 11:50am	PHY 3306	Lab	
	M 9:00am - 9:50am	PHY 0405	Discussion	
0202	Matt Severson	Seats (Total: 28)		
	MWF 12:00pm - 12:50pm	PHY 1412		
	M 2:00pm - 3:50pm	PHY 3306	Lab	
	M 1:00pm - 1:50pm	MTH 0401	Discussion	
0203	Matt Severson	Seats (Total: 28)		
	MWF 12:00pm - 12:50pm	PHY 1412		
	Tu 9:00am - 10:50am	PHY 3306	Lab	
	Tu 8:00am - 8:50am	PHY 1402	Discussion	
0204	Matt Severson	Seats (Total: 28)		
	MWF 12:00pm - 12:50pm	PHY 1412		
	Tu 3:00pm - 4:50pm	PHY 3306	Lab	
	Tu 2:00pm - 2:50pm	MTH 0403	Discussion	
0205	Matt Severson	Seats (Total: 28)		
	MWF 12:00pm - 12:50pm	PHY 1412		
	W 5:00pm - 6:50pm	PHY 3306	Lab	
	W 4:00pm - 4:50pm	MTH 0302	Discussion	
0206	Matt Severson	Seats (Total: 28)		
	MWF 12:00pm - 12:50pm	PHY 1412		
	W 3:00pm - 4:50pm	PHY 3306	Lab	
	W 2:00pm - 2:50pm	MTH 0403	Discussion	

0401	Negar Heidarian Boroujeni	Seats (Total: 26)		
	Tu 7:00pm - 8:50pm	PHY 1410		
	Th 6:30pm - 7:20pm	PHY 1410		
	M 8:00pm - 9:50pm	PHY 3306	Lab	
	W 6:30pm - 7:20pm	PHY 1204	Discussion	
0402	Negar Heidarian Boroujeni	Seats (Total: 26)		
	Tu 7:00pm - 8:50pm	PHY 1410		
	Th 6:30pm - 7:20pm	PHY 1410		
	W 7:30pm - 9:20pm	PHY 3306	Lab	
	M 6:30pm - 7:20pm	PHY 1402	Discussion	
0403	Negar Heidarian Boroujeni	Seats (Total: 26)		
	Tu 7:00pm - 8:50pm	PHY 1410		
	Th 6:30pm - 7:20pm	PHY 1410		
	Tu 5:00pm - 6:50pm	PHY 3306	Lab	
	Th 7:30pm - 8:20pm	PHY 1219	Discussion	
0405	Negar Heidarian Boroujeni	Seats (Total: 16)		
	Tu 7:00pm - 8:50pm	PHY 1410		
	Th 6:30pm - 7:20pm	PHY 1410		
	Th 7:30pm - 9:20pm	PHY 3306	Lab	
	Tu 6:00pm - 6:50pm	MTH 0201	Discussion	
SEF1	Negar Heidarian Boroujeni	Seats (Total: 12)		
	Tu 7:00pm - 8:50pm	PHY 1410		
	Th 6:30pm - 7:20pm	PHY 1410		
	Th 7:30pm - 9:20pm	PHY 3306	Lab	
	Tu 6:00pm - 6:50pm	MTH 0201	Discussion	
<i>Restricted to students in the SIE Program. Click here for more information.</i>				

PHYS122

Fundamentals of Physics II

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: PL General Education: DSNL

Prerequisite: PHYS121; or students who have taken courses with comparable content may contact the department. Credit only granted for: PHYS122, PHYS132, or PHYS332.

A continuation of PHYS121, which together with it, generally satisfies the minimum requirement of medical and dental schools.

Physics clinic, PHY 1214, MTWHF 12,2. If purchasing used books additional software may be required. Students must pay a \$50.00 laboratory materials fee.

0101	Negar Heidarian Boroujeni	Seats (Total: 24)	
	MWF 1:00pm - 1:50pm	SYM 0200	
	M 4:00pm - 5:50pm	PHY 3314	Lab
	M 3:00pm - 3:50pm	CHM 0124	Discussion
0102	Negar Heidarian Boroujeni	Seats (Total: 24)	
	MWF 1:00pm - 1:50pm	SYM 0200	
	Tu 10:00am - 11:50am	PHY 3314	Lab
	Tu 9:00am - 9:50am	ATL 0201	Discussion
0105	Negar Heidarian Boroujeni	Seats (Total: 24)	
	MWF 1:00pm - 1:50pm	SYM 0200	
	Tu 4:00pm - 5:50pm	PHY 3314	Lab
	Th 4:00pm - 4:50pm	MTH 0302	Discussion
0401	Negar Heidarian Boroujeni	Seats (Total: 18)	
	MW 6:00pm - 7:15pm	PHY 1201	
	M 7:30pm - 9:20pm	PHY 3314	Lab
	W 7:30pm - 8:20pm	PHY 1204	Discussion
0402	Negar Heidarian Boroujeni	Seats (Total: 24)	
	MW 6:00pm - 7:15pm	PHY 1201	
	W 7:30pm - 9:20pm	PHY 3314	Lab
	M 7:30pm - 8:20pm	PHY 1204	Discussion
SEF1	Negar Heidarian Boroujeni	Seats (Total: 6)	
	MW 6:00pm - 7:15pm	PHY 1201	
	M 7:30pm - 9:20pm	PHY 3314	Lab
	W 7:30pm - 8:20pm	PHY 1204	Discussion
<i>Restricted to students in the SIE Program. Click here for more information.</i>			

PHYS131

Fundamentals of Physics for Life Sciences I

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHEM131; and (MATH131 or MATH136); and (BSCI160 and BSCI161; or BSCI106); and (BSCI170 and BSCI171; or BSCI105). Or students who have taken courses with comparable content may contact the department. Credit only granted for: PHYS121, PHYS131, or PHYS331.

The first part of a two-semester course in general physics specifically oriented towards applications relevant for students in biology and pre-medical programs. The course covers basic mechanics including forces and energy, properties of matter, and thermodynamics done in authentic biological contexts.

Students must pay a \$50.00 laboratory materials fee.

0101	Edward Redish	Seats (Total: 24)		
	MWF 10:00am - 10:50am	ESJ 1224		
	W 5:00pm - 6:50pm	PHY 3310	Lab	
	W 4:00pm - 4:50pm	PHY 3310	Discussion	
0102	Edward Redish	Seats (Total: 24)		
	MWF 10:00am - 10:50am	ESJ 1224		
	M 4:00pm - 5:50pm	PHY 3310	Lab	
	M 3:00pm - 3:50pm	PHY 3310	Discussion	
0103	Edward Redish	Seats (Total: 24)		
	MWF 10:00am - 10:50am	ESJ 1224		
	Tu 10:00am - 11:50am	PHY 3310	Lab	
	Tu 9:00am - 9:50am	PHY 3310	Discussion	
0104	Edward Redish	Seats (Total: 24)		
	MWF 10:00am - 10:50am	ESJ 1224		
	W 1:00pm - 2:50pm	PHY 3310	Lab	
	W 12:00pm - 12:50pm	PHY 3310	Discussion	
0105	Edward Redish	Seats (Total: 12)		
	MWF 10:00am - 10:50am	ESJ 1224		
	Tu 12:00pm - 1:50pm	PHY 3310	Lab	
	Tu 11:00am - 11:50am	MTH B0425	Discussion	
0107	Edward Redish	Seats (Total: 24)		
	MWF 10:00am - 10:50am	ESJ 1224		
	M 7:00pm - 8:50pm	PHY 3310	Lab	
	M 6:00pm - 6:50pm	PHY 3310	Discussion	
0108	Edward Redish	Seats (Total: 24)		
	MWF 10:00am - 10:50am	ESJ 1224		
	Th 7:00pm - 8:50pm	PHY 3310	Lab	
	Th 6:00pm - 6:50pm	PHY 1402	Discussion	

0201	David Buehrle	Seats (Total: 24)	
	TuTh 2:00pm - 3:15pm	PHY 1410	
	M 12:00pm - 1:50pm	PHY 3310	Lab
	M 11:00am - 11:50am	PHY 3310	Discussion
0202	David Buehrle	Seats (Total: 24)	
	TuTh 2:00pm - 3:15pm	PHY 1410	
	Tu 5:00pm - 6:50pm	PHY 3310	Lab
	Tu 4:00pm - 4:50pm	PHY 3310	Discussion
0203	David Buehrle	Seats (Total: 24)	
	TuTh 2:00pm - 3:15pm	PHY 1410	
	Th 10:00am - 11:50am	PHY 3310	Lab
	Th 9:00am - 9:50am	PHY 3310	Discussion
0204	David Buehrle	Seats (Total: 24)	
	TuTh 2:00pm - 3:15pm	PHY 1410	
	Th 5:00pm - 6:50pm	PHY 3310	Lab
	Th 4:00pm - 4:50pm	PHY 3310	Discussion
0205	David Buehrle	Seats (Total: 24)	
	TuTh 2:00pm - 3:15pm	PHY 1410	
	W 10:00am - 11:50am	PHY 3310	Lab
	W 9:00am - 9:50am	PHY 3310	Discussion
0206	David Buehrle	Seats (Total: 24)	
	TuTh 2:00pm - 3:15pm	PHY 1410	
	Tu 7:00pm - 8:50pm	PHY 3310	Lab
	Tu 6:00pm - 6:50pm	CHM 0122	Discussion
0208	David Buehrle	Seats (Total: 16)	
	TuTh 2:00pm - 3:15pm	PHY 1410	
	W 7:00pm - 8:50pm	PHY 3310	Lab
	W 6:00pm - 6:50pm	PHY 1402	Discussion

PHYS132

Fundamentals of Physics for Life Sciences II

Credits: 4

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS131; or students who have taken courses with comparable content may contact the department. Credit only granted for: PHYS122, PHYS132, or PHYS332.

The second part of a two-semester course in general physics specifically oriented towards applications relevant for students in biology and pre-medical programs. The course covers basic statistical physics, electricity and magnetism, and optics done in authentic biological contexts.

Students must pay a \$50.00 laboratory materials fee.

0101	David Buehrle	Seats (Total: 24)		
	MWF 11:00am - 11:50am	PHY 1412		
	Tu 1:00pm - 2:50pm	PHY 3312	Lab	
	Tu 12:00pm - 12:50pm	PHY 3312	Discussion	
0102	David Buehrle	Seats (Total: 24)		
	MWF 11:00am - 11:50am	PHY 1412		
	Th 4:00pm - 5:50pm	PHY 3312	Lab	
	Th 3:00pm - 3:50pm	PHY 3312	Discussion	
0103	David Buehrle	Seats (Total: 24)		
	MWF 11:00am - 11:50am	PHY 1412		
	M 4:00pm - 5:50pm	PHY 3312	Lab	
	M 3:00pm - 3:50pm	PHY 3312	Discussion	
0104	David Buehrle	Seats (Total: 24)		
	MWF 11:00am - 11:50am	PHY 1412		
	W 4:00pm - 5:50pm	PHY 3312	Lab	
	W 3:00pm - 3:50pm	PHY 3312	Discussion	
0105	David Buehrle	Seats (Total: 24)		
	MWF 11:00am - 11:50am	PHY 1412		
	Tu 4:00pm - 5:50pm	PHY 3312	Lab	
	Tu 3:00pm - 3:50pm	PHY 3312	Discussion	
0106	David Buehrle	Seats (Total: 24)		
	MWF 11:00am - 11:50am	PHY 1412		
	M 7:00pm - 8:50pm	PHY 3312	Lab	
	M 6:00pm - 6:50pm	PHY 3312	Discussion	
0201	David Buehrle	Seats (Total: 24)		
	TuTh 12:30pm - 1:45pm	PHY 1412		
	M 10:00am - 11:50am	PHY 3312	Lab	
	M 9:00am - 9:50am	PHY 3312	Discussion	

0203	David Buehrle	Seats (Total: 24)		
	TuTh 12:30pm - 1:45pm	PHY 1412		
	M 1:00pm - 2:50pm	PHY 3312	Lab	
	M 12:00pm - 12:50pm	PHY 3312	Discussion	
0204	David Buehrle	Seats (Total: 24)		
	TuTh 12:30pm - 1:45pm	PHY 1412		
	W 1:00pm - 2:50pm	PHY 3312	Lab	
	W 12:00pm - 12:50pm	PHY 3312	Discussion	

PHYS161

General Physics: Mechanics and Particle Dynamics

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSNS

Prerequisite: Must have completed or be concurrently enrolled in MATH141. Credit only granted for: PHYS141, PHYS161, or PHYS171.

First semester of a three-semester calculus-based general physics course. Laws of motion, force, and energy; principles of mechanics, collisions, linear momentum, rotation, and gravitation.

Physics clinic, PHY 1214, MTWHF 11, 2. If purchasing used books additional software may be required.

0101	David Buehrle	Seats (Total: 30)		
	MWF 3:00pm - 3:50pm	PHY 1410		
	Tu 3:00pm - 3:50pm	PHY 0405	Discussion	
0104	David Buehrle	Seats (Total: 30)		
	MWF 3:00pm - 3:50pm	PHY 1410		
	F 11:00am - 11:50am	PHY 0405	Discussion	
0201	Hailu Gebremariam	Seats (Total: 30)		
	TuTh 11:00am - 12:15pm	PHY 1410		
	Th 8:00am - 8:50am	PHY 0405	Discussion	
0202	Hailu Gebremariam	Seats (Total: 30)		
	TuTh 11:00am - 12:15pm	PHY 1410		
	Tu 2:00pm - 2:50pm	EGR 0135	Discussion	
0203	Hailu Gebremariam	Seats (Total: 30)		
	TuTh 11:00am - 12:15pm	PHY 1410		
	W 3:00pm - 3:50pm	CHM 0128	Discussion	

0204	Hailu Gebremariam	Seats (Total: 30)	
	TuTh 11:00am - 12:15pm	PHY 1410	
	W 4:00pm - 4:50pm	MTH 0303	Discussion
0301	Hailu Gebremariam	Seats (Total: 30)	
	MWF 10:00am - 10:50am	PHY 1410	
	Th 3:00pm - 3:50pm	HBK 0109	Discussion
0302	Hailu Gebremariam	Seats (Total: 30)	
	MWF 10:00am - 10:50am	PHY 1410	
	Tu 4:00pm - 4:50pm	PHY 1219	Discussion
0303	Hailu Gebremariam	Seats (Total: 30)	
	MWF 10:00am - 10:50am	PHY 1410	
	W 12:00pm - 12:50pm	PHY 0405	Discussion
0304	Hailu Gebremariam	Seats (Total: 30)	
	MWF 10:00am - 10:50am	PHY 1410	
	W 3:00pm - 3:50pm	EGR 3106	Discussion

PHYS165

Introduction to Programming in the Physical Sciences

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS171, PHYS141, or PHYS161; or must have scored 3 or higher on AP PHYS exam.

Introduction to programming using examples in the physical sciences. Provides instruction in the techniques of upper-level languages such as Fortran, C, and Pascal, as well as an introduction to the object oriented programming techniques used in Python, C++ and Java. Includes strong component of visualization and graphing.

0101	Gregory Sullivan	Seats (Total: 38)	
	TuTh 9:30am - 10:45am	PHY 1219	

PHYS170

Professional Physics Seminar

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Corequisite: MATH140. Restriction: Must be in Physics program; or must be in Physics-Education program; or permission of instructor.

Provides a look at some of the major developments of current interest in physics research and discusses the activities physicists undertake in research, education, industry, government, and other areas of the economy.

0101	Thomas Gleason, Donna Hammer	Seats (Total: 35)
	W 12:00pm - 12:50pm	PHY 4221

PHYS171 Introductory Physics: Mechanics and Relativity

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSNS

Prerequisite: (MATH140; and a high school physics course); or permission of CMNS-Physics department. And must have completed or be concurrently enrolled in MATH141. Credit only granted for: PHYS141, PHYS161, or PHYS171.

First semester of a three semester sequence for physics majors and those desiring a rigorous preparation in the physical sciences: kinematics, Newton's laws, energy and work, linear and angular momenta, temperature and pressure, ideal gas law, and special relativity.

Jointly offered with PHYS 171H.

0201	Rajarshi Roy	Seats (Total: 55)
	MWF 9:00am - 9:50am	PHY 1201
	Th 9:00am - 9:50am	ESJ 2212 Discussion

PHYS171H Introductory Physics: Mechanics and Relativity

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: PS General Education: DSNS

Prerequisite: (MATH140; and a high school physics course); or permission of CMNS-Physics department. And must have completed or be concurrently enrolled in MATH141. Credit only granted for: PHYS141, PHYS161, or PHYS171.

First semester of a three semester sequence for physics majors and those desiring a rigorous preparation in the physical sciences: kinematics, Newton's laws, energy and work, linear and angular momenta, temperature and pressure, ideal gas law, and special relativity.

Cross-listed with PHYS171.

0201	Rajarshi Roy	Seats (Total: 55)
	MWF 9:00am - 9:50am	PHY 1201
	Th 9:00am - 9:50am	ESJ 2212 Discussion

PHYS199M**The Manhattan Project**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: PS

General Education: DSHS,
DSNS, SCIS

This course explores the development of the atomic bomb during the Manhattan project. Nuclear Physics is introduced in a historical context from the discovery of radioactivity in 1896 to the discovery of nuclear fission in Germany in 1938; this historical approach allows students to understand how scientific knowledge is built up over time.

0101	Thomas Cohen	Seats (Total: 25)	
	MW 4:00pm - 5:15pm	PHY 1410	
	M 1:00pm - 1:50pm	PHY 1402	Discussion
0102	Thomas Cohen	Seats (Total: 25)	
	MW 4:00pm - 5:15pm	PHY 1410	
	M 2:00pm - 2:50pm	PHY 0405	Discussion
0103	Thomas Cohen	Seats (Total: 25)	
	MW 4:00pm - 5:15pm	PHY 1410	
	Tu 2:00pm - 2:50pm	PHY 0405	Discussion
0104	Thomas Cohen	Seats (Total: 25)	
	MW 4:00pm - 5:15pm	PHY 1410	
	W 1:00pm - 1:50pm	PHY 1402	Discussion

PHYS260**General Physics: Vibration, Waves, Heat, Electricity and Magnetism**

Credits: 3

Grading Method: Regular,
Pass-Fail, AuditGeneral Education: DSNL (if
taken with PHYS261)

Prerequisite: PHYS161 and MATH141. Corequisite: PHYS261. Credit only granted for: PHYS142, PHYS260, or PHYS272.

Second semester of a three-semester calculus-based general physics course. Vibrations, waves, fluids; heat, kinetic theory, and thermodynamics; electrostatics, circuits, and magnetism. PHYS260 and PHYS261 must be taken in the same semester.

If purchasing used books additional software may be required.

0101	Hailu Gebremariam	Seats (Total: 31)	
	MW 4:30pm - 5:45pm	PHY 1412	
	Tu 11:00am - 11:50am	PLS 1119	Discussion

0102	Hailu Gebremariam MW 4:30pm - 5:45pm W 10:00am - 10:50am	Seats (Total: 31) PHY 1412 PHY 0405	Discussion
0104	Hailu Gebremariam MW 4:30pm - 5:45pm W 9:00am - 9:50am	Seats (Total: 30) PHY 1412 PHY 0405	Discussion
0105	Hailu Gebremariam MW 4:30pm - 5:45pm F 3:00pm - 3:50pm	Seats (Total: 30) PHY 1412 PHY 1204	Discussion
0201	Hailu Gebremariam MW 3:00pm - 4:15pm Tu 8:00am - 8:50am	Seats (Total: 30) PHY 1412 PHY 0405	Discussion
0202	Hailu Gebremariam MW 3:00pm - 4:15pm Tu 9:00am - 9:50am	Seats (Total: 31) PHY 1412 HBK 0105	Discussion
0203	Hailu Gebremariam MW 3:00pm - 4:15pm Tu 11:00am - 11:50am	Seats (Total: 31) PHY 1412 PLS 1111	Discussion
0204	Hailu Gebremariam MW 3:00pm - 4:15pm F 2:00pm - 2:50pm	Seats (Total: 31) PHY 1412 PHY 1402	Discussion
0205	Hailu Gebremariam MW 3:00pm - 4:15pm W 12:00pm - 12:50pm	Seats (Total: 31) PHY 1412 PHY 1219	Discussion
0206	Hailu Gebremariam MW 3:00pm - 4:15pm M 4:30pm - 5:20pm	Seats (Total: 31) PHY 1412 PHY 1219	Discussion
0207	Hailu Gebremariam MW 3:00pm - 4:15pm W 4:30pm - 5:20pm	Seats (Total: 30) PHY 1412 MTH B0423	Discussion

0301	Rabindra Mohapatra TuTh 2:00pm - 3:15pm M 12:00pm - 12:50pm	Seats (Total: 30) PHY 1412 PHY 1219	Discussion
0302	Rabindra Mohapatra TuTh 2:00pm - 3:15pm W 11:00am - 11:50am	Seats (Total: 30) PHY 1412 PHY 0405	Discussion
0303	Rabindra Mohapatra TuTh 2:00pm - 3:15pm Tu 12:00pm - 12:50pm	Seats (Total: 31) PHY 1412 PLS 1111	Discussion
0304	Rabindra Mohapatra TuTh 2:00pm - 3:15pm F 1:00pm - 1:50pm	Seats (Total: 30) PHY 1412 PHY 1402	Discussion
0305	Rabindra Mohapatra TuTh 2:00pm - 3:15pm Tu 1:00pm - 1:50pm	Seats (Total: 30) PHY 1412 PHY 0405	Discussion
0401	Vladimir Manucharyan M 7:00pm - 8:50pm W 7:00pm - 7:50pm W 8:00pm - 8:50pm	Seats (Total: 30) PHY 1410 PHY 1410 PHY 0405	Discussion
0402	Vladimir Manucharyan M 7:00pm - 8:50pm W 7:00pm - 7:50pm W 6:00pm - 6:50pm	Seats (Total: 30) PHY 1410 PHY 1410 PHY 1219	Discussion
0501	Michelle Girvan TuTh 3:30pm - 4:45pm F 9:00am - 9:50am	Seats (Total: 31) PHY 1410 PHY 0405	Discussion
0502	Michelle Girvan TuTh 3:30pm - 4:45pm F 12:00pm - 12:50pm	Seats (Total: 31) PHY 1410 PHY 0405	Discussion
0503	Michelle Girvan TuTh 3:30pm - 4:45pm F 10:00am - 10:50am	Seats (Total: 31) PHY 1410 PHY 1219	Discussion

0504	Michelle Girvan	Seats (Total: 31)	
	TuTh 3:30pm - 4:45pm	PHY 1410	
	W 10:00am - 10:50am	PHY 1219	Discussion
0505	Michelle Girvan	Seats (Total: 31)	
	TuTh 3:30pm - 4:45pm	PHY 1410	
	F 2:00pm - 2:50pm	PHY 1219	Discussion

PHYS260H General Physics: Vibration, Waves, Heat, Electricity and Magnetism

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSNL (if taken with PHYS261)

Prerequisite: PHYS161 and MATH141. Corequisite: PHYS261. Credit only granted for: PHYS142, PHYS260, or PHYS272.

Second semester of a three-semester calculus-based general physics course. Vibrations, waves, fluids; heat, kinetic theory, and thermodynamics; electrostatics, circuits, and magnetism. PHYS260 and PHYS261 must be taken in the same semester.

If purchasing used books additional software may be required.

0301	Rabindra Mohapatra	Seats (Total: 25)	
	TuTh 2:00pm - 3:15pm	PHY 1412	
	M 12:00pm - 12:50pm	HBK 0105	Discussion

PHYS261 General Physics: Vibrations, Waves, Heat, Electricity and Magnetism (Laboratory)

Credits: 1 Grading Method: Regular, Pass-Fail, Audit

Corequisite: PHYS260.

Lab includes experiments on mechanics, vibrations, waves, heat, electricity and magnetism. PHYS260 and PHYS261 (lab) must be taken in the same semester.

Students must pay a \$50.00 laboratory materials fee.

0202	Matt Severson	Seats (Total: 36)	
	M 10:30am - 12:50pm	PHY 3219	Lab
0203	Matt Severson	Seats (Total: 36)	
	M 1:00pm - 3:20pm	PHY 3219	Lab

0204	Matt Severson M 4:30pm - 6:50pm	Seats (Total: 36) PHY 3219	Lab
0205	Matt Severson M 7:00pm - 9:20pm	Seats (Total: 36) PHY 3219	Lab
0206	Matt Severson Tu 9:00am - 11:20am	Seats (Total: 36) PHY 3219	Lab
0207	Matt Severson Tu 11:30am - 1:50pm	Seats (Total: 36) PHY 3219	Lab
0208	Matt Severson Tu 2:00pm - 4:20pm	Seats (Total: 36) PHY 3219	Lab
0209	Matt Severson Tu 4:30pm - 6:50pm	Seats (Total: 36) PHY 3219	Lab
0210	Matt Severson Tu 7:00pm - 9:20pm	Seats (Total: 36) PHY 3219	Lab
0212	Matt Severson W 10:30am - 12:50pm	Seats (Total: 36) PHY 3219	Lab
0213	Matt Severson W 1:00pm - 3:20pm	Seats (Total: 36) PHY 3219	Lab
0214	Matt Severson W 4:30pm - 6:50pm	Seats (Total: 36) PHY 3219	Lab
0215	Matt Severson W 7:00pm - 9:20pm	Seats (Total: 36) PHY 3219	Lab
0216	Matt Severson Th 9:00am - 11:20am	Seats (Total: 36) PHY 3219	Lab
0217	Matt Severson Th 11:30am - 1:50pm	Seats (Total: 36) PHY 3219	Lab
0218	Matt Severson Th 2:00pm - 4:20pm	Seats (Total: 36) PHY 3219	Lab

0219	Matt Severson Th 4:30pm - 6:50pm	Seats (Total: 36) PHY 3219	Lab
0220	Matt Severson Th 7:00pm - 9:20pm	Seats (Total: 36) PHY 3219	Lab
0221	Matt Severson F 9:00am - 11:20am	Seats (Total: 36) PHY 3219	Lab

PHYS270

General Physics: Electrodynamics, Light, Relativity and Modern Physics

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSNL (if taken with PHYS271)

Prerequisite: PHYS261, MATH241, and PHYS260. Corequisite: PHYS271.

Third semester of a three-semester calculus-based general physics course. Electrodynamics, Maxwell's equations and electromagnetic waves, geometrical optics, interference, diffraction, special theory of relativity, and modern physics. PHYS270 and PHYS271 (lab) must be taken in the same semester.

If purchasing used books additional software may be required.

0101	Eun-Suk Seo TuTh 5:00pm - 6:15pm Th 2:00pm - 2:50pm	Seats (Total: 33) PHY 1410 EGR 3106	Discussion
0102	Eun-Suk Seo TuTh 5:00pm - 6:15pm Th 4:00pm - 4:50pm	Seats (Total: 33) PHY 1410 PHY 1219	Discussion
0103	Eun-Suk Seo TuTh 5:00pm - 6:15pm W 9:00am - 9:50am	Seats (Total: 33) PHY 1410 CHM 0128	Discussion
0301	Xiangdong Ji MWF 12:00pm - 12:50pm W 1:00pm - 1:50pm	Seats (Total: 34) PHY 1410 PHY 0405	Discussion
0302	Xiangdong Ji MWF 12:00pm - 12:50pm W 2:00pm - 2:50pm	Seats (Total: 34) PHY 1410 EGR 2154	Discussion

0303	Xiangdong Ji	Seats (Total: 34)	
	MWF 12:00pm - 12:50pm	PHY 1410	
	F 2:00pm - 2:50pm	MTH 0106	Discussion
0304	Xiangdong Ji	Seats (Total: 34)	
	MWF 12:00pm - 12:50pm	PHY 1410	
	F 3:00pm - 3:50pm	MTH 0304	Discussion

PHYS271 General Physics: Electrodynamics, Light, Relativity and Modern Physics (Laboratory)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS261. Corequisite: PHYS270.

Lab includes experiments on ac circuits, magnetism, light and modern physics. PHYS270 and PHYS271 (lab) must be taken in the same semester.

Students must pay a \$50.00 laboratory materials fee.

0102	Matt Severson	Seats (Total: 36)	
	M 3:00pm - 5:50pm	PHY 3213	Lab
0103	Matt Severson	Seats (Total: 36)	
	M 6:00pm - 8:50pm	PHY 3213	Lab
0104	Matt Severson	Seats (Total: 36)	
	W 4:00pm - 6:50pm	PHY 3213	Lab
0105	Matt Severson	Seats (Total: 36)	
	Tu 10:00am - 12:50pm	PHY 3213	Lab
0106	Matt Severson	Seats (Total: 36)	
	Tu 1:00pm - 3:50pm	PHY 3213	Lab
0108	Matt Severson	Seats (Total: 36)	
	Tu 7:00pm - 9:50pm	PHY 3213	Lab
0117	Matt Severson	Seats (Total: 36)	
	Th 11:00am - 1:50pm	PHY 3213	Lab
0118	Matt Severson	Seats (Total: 36)	
	Th 2:00pm - 4:50pm	PHY 3213	Lab

PHYS272 **Introductory Physics: Fields**

Credits: 3 Grading Method: Regular, General Education: DSNL (if
Pass-Fail, Audit taken with PHYS275)

Prerequisite: PHYS161 or PHYS171; and MATH141; and must have completed or be concurrently enrolled in MATH241. Credit only granted for: PHYS142, (PHYS260 and PHYS261) or PHYS272.. Additional information: CORE Distributive Studies Physical Sciences Laboratory Course only when taken concurrently with PHYS275.

Second semester of a calculus based general physics course. Universal gravitation, electric and magnetic fields and potentials, simple circuits, Maxwell's equations in integral form. Continues the application of mathematics to conceptual models, now with more abstract components.

Jointly offered with PHYS 272H.

0101	Richard Greene	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	PHY 1204
	F 11:00am - 11:50am	IRB 1116
0201	Jordan Goodman	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	PHY 1204
	M 12:00pm - 12:50pm	PHY 4221

PHYS272H **Introductory Physics: Fields**

Credits: 3 Grading Method: Regular, General Education: DSNL (if
Pass-Fail, Audit taken with PHYS275)

Prerequisite: PHYS161 or PHYS171; and MATH141; and must have completed or be concurrently enrolled in MATH241. Credit only granted for: PHYS142, (PHYS260 and PHYS261) or PHYS272.. Additional information: CORE Distributive Studies Physical Sciences Laboratory Course only when taken concurrently with PHYS275.

Second semester of a calculus based general physics course. Universal gravitation, electric and magnetic fields and potentials, simple circuits, Maxwell's equations in integral form. Continues the application of mathematics to conceptual models, now with more abstract components.

For general honors students only. Jointly offered with PHYS 272.

0101	Richard Greene	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	PHY 1204
	F 11:00am - 11:50am	IRB 1116

0201	Jordan Goodman	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	PHY 1204
	M 12:00pm - 12:50pm	PHY 4221

PHYS273 Introductory Physics: Waves

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Prerequisite: MATH241 and PHYS272. Corequisite: PHYS274.

Oscillations and AC circuits using complex variables, Fourier series and integrals, waves on strings, sound; electromagnetic waves from Maxwell's equations in differential form; physical optics.

Jointly offered with PHYS 273H.

0101	Carter Hall	Seats (Total: 62)
	TuTh 12:30pm - 1:45pm	PHY 1410
	F 11:00am - 11:50am	PHY 1410

PHYS273H Introductory Physics: Waves

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Prerequisite: MATH241 and PHYS272. Corequisite: PHYS274.

Oscillations and AC circuits using complex variables, Fourier series and integrals, waves on strings, sound; electromagnetic waves from Maxwell's equations in differential form; physical optics.

For general honors students only. Jointly offered with PHYS 273.

0101	Carter Hall	Seats (Total: 62)
	TuTh 12:30pm - 1:45pm	PHY 1410
	F 11:00am - 11:50am	PHY 1410

PHYS274 Mathematical Methods for Physics I

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Prerequisite: MATH241 and PHYS272.

A first course in mathematical methods for physics. Topics include linear algebra, curvilinear coordinates and vector analysis.

0101	Raman Sundrum	Seats (Total: 50)
	MWF 12:00pm - 12:50pm	PHY 1201

PHYS275 Experimental Physics I: Mechanics and Heat

(Perm req)

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS161 or PHYS171; and PHYS174. Additional information: CORE Physical Science Lab (PL) Course only when taken concurrently with PHYS272.

Methods and rationale of experimental physics. Intended for physics majors and science and engineering students who desire a more rigorous approach. Experiments chosen from the areas of mechanics (from PHYS171), gas laws, and heats. Theory and applications of error analysis.

0101	Frederick Wellstood	Seats (Total: 13)	
	M 2:00pm - 5:50pm	PHY 3104	Lab
0201	Frederick Wellstood	Seats (Total: 13)	
	W 2:00pm - 5:50pm	PHY 3104	Lab
0301	Alberto Belloni	Seats (Total: 13)	
	Tu 2:00pm - 5:50pm	PHY 3104	Lab
0401	Alberto Belloni	Seats (Total: 13)	
	Th 2:00pm - 5:50pm	PHY 3104	Lab

PHYS276 Experimental Physics II: Electricity and Magnetism

(Perm req)

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS272 and PHYS275.

Second course in the three semester introductory sequence. Methods and rationale of experimental physics. Experiments chosen from the fields of electricity and magnetism including electrostatics, magnetostatics, magnetic induction, AC circuits.

0101	Norbert Linke	Seats (Total: 12)	
	M 2:00pm - 5:50pm	PHY 3120	Lab
0201	Norbert Linke	Seats (Total: 12)	
	Tu 2:00pm - 5:50pm	PHY 3120	Lab

0301	Sarah Eno	Seats (Total: 11)	
	Th 2:00pm - 5:50pm	PHY 3120	Lab
0401	Sarah Eno	Seats (Total: 12)	
	W 2:00pm - 5:50pm	PHY 3120	Lab

PHYS299 Special Problems in Physics

(Perm req)

Credits: 1-6

Grading Method: Regular,
Pass-Fail, Audit

Research or special study to complement courses taken elsewhere which are not fully equivalent to those in departmental requirements. Credit according to work done.

Contact department for information to register for this course.

PHYS371 Modern Physics

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS273 and PHYS274. Corequisite: PHYS373. Credit only granted for: PHYS371 or PHYS420. Additional information: This course is intended primarily for physics and astronomy majors.

Introduces students to special relativity, thermodynamics and quantum mechanics at an intermediate level.

0101	Steven Anlage	Seats (Total: 76)	
	MWF 1:00pm - 1:50pm	PHY 1410	

PHYS373 Mathematical Methods for Physics II

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS273 and PHYS274.

A second course in mathematical methods for physics. Topics include introduction to ordinary differential equations, partial differential equations, and complex analysis.

0101	Zackaria Chacko	Seats (Total: 72)	
	TuTh 9:30am - 10:45am	CCC 1205	

PHYS375 Experimental Physics III: Electromagnetic Waves, Optics and Modern Physics

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP

Prerequisite: PHYS276 and PHYS273.

Third course in the three-semester introductory sequence. Methods and rationale of experimental physics. Experiments chosen from the areas of electromagnetic waves, optics and modern physics.

Besides lab hours scheduled below, additional required lab time will be arranged.

0101	Andris Skuja, Manuel Franco Sevilla	Seats (Total: 15)	
	M 2:00pm - 2:50pm	PHY 1410	
	M 3:00pm - 5:50pm	PHY 3115	Lab
0102	Andris Skuja, Manuel Franco Sevilla	Seats (Total: 15)	
	M 2:00pm - 2:50pm	PHY 1410	
	W 3:00pm - 5:50pm	PHY 3115	Lab
0103	Manuel Franco Sevilla, Andris Skuja	Seats (Total: 15)	
	M 2:00pm - 2:50pm	PHY 1410	
	Tu 3:00pm - 5:50pm	PHY 3115	Lab
0104	Manuel Franco Sevilla, Andris Skuja	Seats (Total: 15)	
	M 2:00pm - 2:50pm	PHY 1410	
	Th 3:00pm - 5:50pm	PHY 3115	Lab

PHYS386

Experiential Learning

(Perm req)

Credits: 3-6

Grading Method: Regular,
Pass-Fail

Contact department for information to register for this course.

PHYS389

Undergraduate Thesis Research

(Perm req)

Credits: 1-6

Grading Method: Regular,
Pass-Fail, Audit

Independent directed research and study on a topic selected by the student in consultation with his or her advisor. Final written thesis and oral defense will be expected.

Contact department for information to register for this course.

PHYS398

Independent Studies Seminar

(Perm req)

Credits: 1-16

Grading Method: Regular,
Pass-Fail, Audit

Credit according to work done. Enrollment is limited to students admitted to the independent studies program in physics.

Contact department for information to register for this course.

PHYS399 Special Problems in Physics

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Selected advanced experiments. (Will be given with sufficient demand.)

Contact department for information to register for this course.

PHYS399D Special Problems in Physics; Physics STEM Seminar II

(Perm req)

Credits: 2

Grading Method: Regular

Selected advanced experiments. (Will be given with sufficient demand.)

0101	Thomas Gleason, Donna Hammer	Seats (Total: 8)
	F 9:00am - 9:50am	PHY 1204
	Contact instructor or department for details.	

PHYS399E Special Problems in Physics; Physics STEM Seminar III

(Perm req)

Credits: 1

Grading Method: Regular,
Pass-Fail, Audit

Selected advanced experiments. (Will be given with sufficient demand.)

0101	Thomas Gleason, Donna Hammer	Seats (Total: 12)
	Meets September 9, 2019 - December 9, 2019	
	Contact instructor or department for details.	

PHYS401 Quantum Physics I

Credits: 4

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS371 and PHYS373. Formerly: PHYS421.

Introduces some quantum phenomena leading to wave-particle duality. Schroedinger theory for bound states and scattering in one dimension. One-particle Schroedinger equation and the hydrogen atom.

0101	Christopher Lobb	Seats (Total: 55)
	MWF 10:00am - 10:50am	PHY 1201
	W 11:00am - 11:50am	ESJ 1224

PHYS402 Quantum Physics II

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS401.

Quantum states as vectors; spin and spectroscopy, multiparticle systems, the periodic table, perturbation theory, band structure, etc.

0101	Theodore Jacobson	Seats (Total: 49)
	MW 10:00am - 10:50am	PHY 1402
	MW 11:00am - 11:50am	PHY 1402

PHYS404 Introduction to Statistical Thermodynamics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS371 or PHYS420.

Introduction to basic concepts in thermodynamics and statistical mechanics.

0101	James Williams	Seats (Total: 55)
	MWF 9:00am - 9:50am	ATL 2324

PHYS405 Advanced Experiments

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS375. Restriction: Must be in a major within CMNS-Physics department.

Advanced laboratory techniques. Selected experiments from many fields of modern physics. Emphasis on self-study of the phenomena, data analysis, and presentation in report form.

0101	Abolhassan Jawahery	Seats (Total: 20)
	W 12:00pm - 12:50pm	PHY 1402 Lab
	TBA	PHY 3112 Lab

PHYS407 Undergraduate Experimental Research

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP

Prerequisite: PHYS499 and PHYS375; and permission of CMNS-Physics department. Restriction: Must be in a major within CMNS-Physics department; and senior standing.

Students develop and complete an independent, experimental research project with a professor in the Physics Department. The project should be a continuation of work done in PHYS499A. To obtain permission, students must submit a proposal describing the experimental work to be completed and this proposal must be approved by their faculty mentor, the associate chair for undergraduate education and the chair of the laboratory committee. Students must maintain a lab notebook, give an oral presentation and complete a written report on their research that includes data and error analysis.

0101	Kara Hoffman	Seats (Total: 10)
	Contact instructor or department for details.	

PHYS410

Classical Mechanics

Credits: 4

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS373.

Theoretical foundations of mechanics with extensive application of the methods. Various mathematical tools of theoretical physics.

0101	Daniel Lathrop	Seats (Total: 60)
	TuTh 9:00am - 10:50am	PHY 1201

PHYS411

Intermediate Electricity and Magnetism

Credits: 4

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS373.

Foundations of electromagnetic theory, with extensive applications of the methods. Thorough treatment of wave properties of solutions of Maxwell's equations.

0101	Victor Yakovenko	Seats (Total: 49)
	TuTh 11:00am - 12:50pm	PHY 1402

PHYS420

Principles of Modern Physics

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH246. And PHYS271 and PHYS270; or PHYS273. Credit only granted for: PHYS371 or PHYS420.

A survey of atomic and nuclear phenomena and the main trends in modern physics. Appropriate for students in engineering and other physical sciences.

0101	Theodore Einstein	Seats (Total: 40)
	MW 3:30pm - 4:45pm	PHY 0405

PHYS431 Properties of Matter

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS271, PHYS270, and MATH241; and (PHYS401 or PHYS420). Cross-listed with ENMA460. Credit only granted for: ENMA460 or PHYS431.

Introduction to solid state physics. Electromagnetic, thermal, and elastic properties of metals, semiconductors, insulators and superconductors.

0101	Gottlieb Oehrlein	Seats (Total: 15)
	MW 5:00pm - 6:15pm	CHE 2108

PHYS444 Computing Beyond the Standard Model of Particle Physics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS371 and PHYS373; or permission of instructor.

An exploration of the computing languages and techniques used to analyze large data sets in Large Hadron Collider physics with some discussion of applications in unrelated fields.

0101	Shabnam Jabeen	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	PHY 3301

PHYS475 Introduction to Relativity, Gravitation and Cosmology

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS373 and PHYS410; or permission of instructor. Restriction: Permission of CMNS-Physics department. Additional information: Intended primarily for undergraduate physics majors.

Review of special relativity, followed by a study of the equivalence principle, curved spacetimes, and Einstein's equations. Selected applications to the solar system, stellar structure, black holes, gravitational waves, and cosmology.

0101	Bei Lok Hu	Seats (Total: 10)		
	MW 1:00pm - 2:15pm	PSC 3150		
	F 1:00pm - 1:50pm	PSC 3150	Discussion	

PHYS485 Electronic Circuits

(Perm req)

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PHYS405. Corequisite: PHYS374. Restriction: Must be in a major within CMNS-Physics department.

Theory and application to experimental physics of modern semiconductor analog and digital circuits. Emphasis on understanding passive and active elements in practical circuits. Topics span the range from simple transistor circuits to microcomputers.

Additional Note: Jointly offered with PHYS685. Credit only granted for PHYS485 or PHYS685.

0101	Ki-Yong Kim	Seats (Total: 24)		
	MF 2:00pm - 2:50pm	CHE 2136		
	W 1:00pm - 4:50pm	PHY 3321	Lab	
0102	Ki-Yong Kim	Seats (Total: 18)		
	MF 2:00pm - 2:50pm	CHE 2136		
	Tu 1:00pm - 4:50pm	PHY 3321	Lab	

PHYS499A Special Problems in Physics

(Perm req)

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Research or special study. Credit according to work done.

Contact department for information to register for this course.

PHYS499B Special Problems in Physics

(Perm req)

Credits: 1-16 Grading Method: Regular,
Pass-Fail, Audit

Research or special study. Credit according to work done.

Contact department for information to register for this course.

PHYS499V Special Problems in Physics; Colloquium for Undergraduate Physics Majors

(Perm req)

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Research or special study. Credit according to work done.

0101	Instructor: TBA	Seats (Total: 60)
	Th 4:00pm - 6:15pm	PHY 1201

PHYS601 Theoretical Dynamics

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: PHYS410; or students who have taken courses with comparable content may contact the department.

Lagrangian and Hamiltonian mechanics, two-body central force problem, rigid body motion, small oscillations, continuous systems.

0101	Paulo Bedaque	Seats (Total: 49)
	TuTh 12:30pm - 1:45pm	HBK 0115

PHYS604 Methods of Mathematical Physics

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have completed coursework in advanced calculus; and (PHYS411 and PHYS410). Or students who have taken courses with comparable content may contact the department.

Ordinary and partial differential equations of physics, boundary value problems, Fourier series, Green's functions, complex variables and contour integration.

0101	Zohreh Davoudi	Seats (Total: 50)
	TuTh 9:30am - 10:45am	ATL 1113

PHYS622 Introduction to Quantum Mechanics I

(Perm req)

Credits: 4 Grading Method: Regular,
Audit

Prerequisite: Must have an outstanding undergraduate background in physics.

First and second semesters. A study of the Schrodinger equation, matrix formulations of quantum mechanics, approximation methods, scattering theory, etc. Applications to solid state, atomic, and nuclear physics.

0201	Kaustubh Agashe	Seats (Total: 67)
	MW 10:00am - 10:50am	ATL 1113
	F 10:00am - 11:50am	ATL 1113

PHYS624 Advanced Quantum Mechanics

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: PHYS623.

Relativistic wave equations, second quantization in many body problems and relativistic wave equations, Feynman-Dyson perturbation theory, applications to many body problems, application to quantum electrodynamics, elements of renormalization.

0101	Anson Hook	Seats (Total: 38)
	TuTh 9:30am - 10:45am	JMP 1202

PHYS662 Intersections of Technology and Policy: Modernizing the Energy System

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: Graduate Status in one of the Natural Sciences, Engineering, Public Policy, Economics OR senior-level standing in one of the disciplines above with at least a 3.0 GPA.

A broad, practical introduction to the issues and assessment approaches used to evaluate technical innovation in the Energy System. Introduction to the use of Sankey Diagrams, Life Cycle Analysis, Techno-economic analysis, and Equilibrium Economic Analysis, as well as policy factors such as Energy Efficiency Standards, Vehicle Fuel Economy, Feed-in-tariffs and environmental regulations.

Cross-listed with PLCY699B. Credit granted for PHYS662 or PLCY699B.

0101	Kavita Surana, Ellen Williams	Seats (Total: 9)
	TuTh 9:30am - 10:45am	IPT 1116

PHYS675 Introduction to Relativity, Gravitation and Cosmology

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: PHYS606 and PHYS601.

Review of special relativity, followed by a study of the equivalence principle, curved spacetimes, and Einstein's equations. Selected applications to the solar system, stellar structure, black holes, gravitational waves, and cosmology.

0101	Bei Lok Hu	Seats (Total: 28)	
	MW 1:00pm - 2:15pm	PSC 3150	
	F 1:00pm - 1:50pm	PSC 3150	Discussion

PHYS685 Research Electronics

(Perm req)

Credits: 4 Grading Method: Regular

Prerequisite: PHYS374 or PHYS405; or students who have taken courses with comparable content may contact the department. Restriction: Must not have completed PHYS485. Credit only granted for: PHYS485 or PHYS685.

An integrated lecture and laboratory course in electronics with equal emphasis on experimental methods and results and analysis using device models and up-to-date mathematical and numerical tools. Experiments and analysis of circuits with passive and single active devices form the background for the study of operational amplifiers, digital integrated circuits and systems, and microcomputers. The general topics of impedance matching, frequency response, feedback, interfacing and the extraction of signal from noise are stressed.

Additional Note: Jointly offered with PHY485. Credit only granted for PH YS685or PHYS485.

0101	Ki-Yong Kim	Seats (Total: 24)	
	MF 2:00pm - 2:50pm	CHE 2136	
	W 1:00pm - 4:50pm	PHY 3321	Lab
0102	Ki-Yong Kim	Seats (Total: 18)	
	MF 2:00pm - 2:50pm	CHE 2136	
	Tu 1:00pm - 4:50pm	PHY 3321	Lab

PHYS709 Seminar in General Physics; Statistical Physics

Credits: 1 Grading Method: Regular, Audit

Cross-listed with CHPH709B.

0101	John Weeks	Seats (Total: 30)	
	Tu 1:15pm - 2:30pm	IPT 1116	

PHYS715 Chaotic Dynamics

Credits: 3 Grading Method: Regular, Audit

Prerequisite: PHYS601.

Theory and applications of chaos in dynamical systems including such topics as strange attractors, Lyapunov exponents, quasiperiodicity, period doubling, intermittency, crises, fractal basin boundaries, chaotic scattering, KAM tori, and quantum chaos.

0101	Edward Ott	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	PHY 1219

PHYS721 Atomic and Optical Physics I (Survey)

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: PHYS623.

A survey of topics involving the physics of atoms and their interaction with radiation, including atoms in external fields, lasers, atomic spectroscopy and atomic structure.

0101	Alicia Kollar	Seats (Total: 25)
	WF 2:30pm - 3:45pm	ATL 1109

PHYS728 Seminar in Atomic and Molecular Physics

Credits: 1 Grading Method: Regular,
 Audit

0101	Steven Rolston	Seats (Total: 30)
	M 11:00am - 12:50pm	ATL 2400

PHYS732 Introduction to Solid State Physics II

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: PHYS731.

Second semester of survey course in condensed matter physics including topics in semiconductors, surface physics, magnetism and superconductivity.

0101	Maissam Barkeshli	Seats (Total: 25)
	MW 1:00pm - 2:15pm	CHE 2118

PHYS738 Seminar in Experimental Solid State Physics; Quantum Mechanical Many-Body Problems

Credits: 1 Grading Method: Regular,
 Audit

0101	Johnpierre Paglione	Seats (Total: 15)
	Th 2:00pm - 3:50pm	PHY 1201

PHYS739 Seminar in Theoretical Solid State Physics; Quantum Mechanical Many-Body Problems

Credits: 1 Grading Method: Regular,
Audit

0101	Sankar Das Sarma	Seats (Total: 15)
	Tu 11:00am - 12:15pm	PSC 3150

PHYS748 Seminar in Experimental Nuclear Physics

Credits: 1 Grading Method: Regular,
Audit

0101	Elizabeth Beise, Carter Hall	Seats (Total: 24)
	W 2:30pm - 4:00pm	PHY 2202

PHYS749 Seminar in Theoretical Nuclear Physics

Credits: 1 Grading Method: Regular,
Audit

0101	Xiangdong Ji	Seats (Total: 20)
	W 4:00pm - 6:00pm	PHY 1219

PHYS758E Seminar in Elementary Particles and Quantum Field Theory; Seminar in Elementary Particles and Quantum Field Theory

Credits: 1 Grading Method: Regular,
Audit

0101	Alberto Belloni	Seats (Total: 25)
	W 4:00pm - 5:50pm	PHY 1201

PHYS759 Seminar in Elementary Particles and Quantum Field Theory

Credits: 1 Grading Method: Regular,
Audit

0101	Kaustubh Agashe	Seats (Total: 15)
	M 3:00pm - 4:00pm	EGR 3111

PHYS761

Credits: 3

Prerequisite: PHYS606 and PHYS604.

A detailed study of plasma physics. The first semester treats particle orbit theory, magnetohydrodynamics, plasma waves, and transport phenomena.

0101	Thomas Antonsen	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	JMP 2202

PHYS769

Credits: 1

Class will meet in ERF 1207.

0101	Adil Hassam	Seats (Total: 20)
	W 4:00pm - 5:15pm	ERF 1207

PHYS778

Credits: 1

0101	Eun-Suk Seo	Seats (Total: 20)
	M 4:30pm - 5:45pm	ATL 2400

PHYS798

(Perm req)

Credits: 1-3

Projects or special study in advanced physics.

Contact department for information to register for this course.

PHYS798B

Credits: 1

Projects or special study in advanced physics.

0101	Thomas Cohen	Seats (Total: 160)
	Tu 3:30pm - 6:00pm	PHY 1412

PHYS798D Special Problems in Advanced Physics; Applied Dynamics Seminar

Credits: 1 Grading Method: Regular,
Audit

Projects or special study in advanced physics.

0101	Edward Ott, Rajarshi Roy	Seats (Total: 10)
	Th 12:30pm - 1:30pm	ERF 1207

PHYS798L Special Problems in Advanced Physics; Biophysics

Credits: 1 Grading Method: Regular,
Audit

Projects or special study in advanced physics.

0101	Arpita Upadhyaya	Seats (Total: 10)
	M 4:00pm - 5:30pm	IPT 1116

PHYS798T Special Problems in Advanced Physics; Interdisciplinary Network Science Seminar

Credits: 1 Grading Method: Regular,
Audit

Projects or special study in advanced physics.

0101	Michelle Girvan, Daniel Serrano	Seats (Total: 25)
	M 2:00pm - 2:50pm	PHY 4222

PHYS799 Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

PHYS838C Special Topics in Experimental Solid State Physics; Superconductivity, Quantum Materials and Nanoscience Seminar

Credits: 2 Grading Method: Regular,
Audit

Credit according to work done.

0102	M Apolonia Calderon, Philip Joyce MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 28) ARM 0131 BPS 1228	Discussion
0103	Philip Joyce, M Apolonia Calderon MW 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 28) ARM 0131 BPS 1236	Discussion
0104	Philip Joyce, M Apolonia Calderon MW 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 28) ARM 0131 SYM 0215	Discussion
0105	Philip Joyce, M Apolonia Calderon MW 2:00pm - 2:50pm F 12:00pm - 12:50pm	Seats (Total: 28) ARM 0131 HBK 0123	Discussion
0106	Philip Joyce, M Apolonia Calderon MW 2:00pm - 2:50pm F 12:00pm - 12:50pm	Seats (Total: 28) ARM 0131 HBK 1108	Discussion
0107	Philip Joyce, M Apolonia Calderon MW 2:00pm - 2:50pm F 1:00pm - 1:50pm	Seats (Total: 28) ARM 0131 PHY 1219	Discussion

PLCY201

Public Leaders and Active Citizens

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, DSSP, SCIS

Credit only granted for: PLCY201 or PUA201. Formerly: PUA201.

Aims to inspire, teach and engage students in the theory and practice of public leadership from the local to the national to the global level. Students will learn and apply diverse approaches to leadership in a multicultural society while developing an understanding of key frameworks and practices necessary to foster collective action across private, public, and nonprofit sectors. This course will allow students to become informed citizens able to reason critically and persuasively about public matters. Students will also explore and assess their own personal values, beliefs, and purpose as they develop their leadership potential.

0101	Susannah Washburn TuTh 2:00pm - 3:15pm	Seats (Total: 96) CCC 1205	<i>Restricted to freshman students in College Park Scholars Public Leadership program.</i>
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0201	Eric Luedtke	Seats (Total: 48)
	TuTh 11:00am - 12:15pm	ITV 1111
FC01	Eric Luedtke	Seats (Total: 36)
	TuTh 3:00pm - 4:15pm	TWS 1100
	<i>Restricted to students in Freshmen Connection.</i>	
FC02	Eric Luedtke	Seats (Total: 36)
	TuTh 4:30pm - 5:45pm	TWS 1100
	<i>Restricted to students in Freshmen Connection.</i>	

PLCY203
Liberty and Justice for All: Ethics and Moral Issues in Public Policy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Provides each student with an opportunity to develop the ability to think in sophisticated ways about morally difficult policy issues.

0101	Jennifer Littlefield	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	TLF 1126
0102	Thomas Hilde	Seats (Total: 41)
	TuTh 3:30pm - 4:45pm	TYD 2110
0201	Mathew Feehan	Seats (Total: 40)
	MW 7:30pm - 8:45pm	JMZ 2206

PLCY213
Foundations of Nonprofit Leadership and Social Innovation

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Through discussions of contemporary trends, challenges and issues, this course provides an introduction to the nonprofit and NGO sectors, social innovation, and the leadership and management skills required to achieve social impact. The course will explore the history, theories, and roles of philanthropy, the nonprofit sector, and social innovation in societies and cultures. Students will be able to demonstrate an understanding of the process and principles of social entrepreneurship and social innovation. Additionally, the course will introduce students to topics in leadership, social innovation, resource development, community mobilization through networks, the role of policy-making in creating change, project management, and overall strategies for achieving social impact. The course will include mini hands-on learning experiences that allow them to apply key learning outcomes.

0101	Claire Dunning TuTh 9:30am - 10:45am	Seats (Total: 40) TYD 1108
0201	Alexander Counts Tu 3:30pm - 6:00pm	Seats (Total: 40) VMH 1207

PLCY214

Leading and Investing in Social Change: Re-defining and Experimenting with Philanthropy

Credits: 3

Grading Method: Regular

General Education: DSSP,
SCIS

Credit only granted for: PLCY214, PUA214 or PUA359I. Formerly: PUA359I, PUA214.

Defines philanthropy as an exploration of how one develops a vision of the public good and then deploys resources (including donations, volunteers, and voluntary associations) to achieve an impact.

Restricted to students in Carillon Communities.

0101	Patricia Bory TuTh 2:00pm - 3:15pm	Seats (Total: 65) ASY 2309
<i>Restricted to students in the iGive Living Learning Program.</i>		

PLCY300

Governance: Collective Action in the Public Interest

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PLCY100. Restriction: Must be in a major in PLCY-School of Public Policy.

Examination of societal responses to public problems, including actions by government, non-profit and private sector actors, as well as civil society. Students will examine the roles of these various actors, as well as the nature of civic responsibility. The course will examine the various stages of the policy process, asking the following questions: How does something get defined as a problem that requires a public policy response? How do we think about what the options are for this response, and how do we choose among them? What are the factors that contribute to successful policy implementation? How do we evaluate the success of public policies? These questions will be addressed using examples of current public policy problems, and students will be expected to engage in individual and collaborative work to design responses to those problems.

0101	Alana Hackshaw TuTh 3:30pm - 4:45pm	Seats (Total: 40) SQH 1105
0102	Alana Hackshaw MWF 12:00pm - 12:50pm	Seats (Total: 40) TYD 1118

PLCY301**Sustainability**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with AGNR301. Credit only granted for: AGNR301, PUA301, or PLCY301. Formerly: PUA301.

Designed for students whose academic majors would be enhanced by the complementary study of a widely shared but hard-to-operationalize aspiration: that present choices should preserve or improve future options rather than foreclose or degrade them. How should we understand sustainability? How might we achieve it? How would we know if we had achieved it? And how could sustainability activists of a rising generation lead by example?

0101	Caroline Boules	Seats (Total: 165)
	TuTh 12:30pm - 1:45pm	LEF 2205

PLCY302**Examining Pluralism in Public Policy**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DVCC

Credit only granted for: PLCY302 or PUA302. Formerly: PUA302.

Understanding pluralism and how groups and individuals coexist in society is an essential part of the public policy process. This course will examine the ways in which the diverse experiences of race, gender, ethnicity, class, orientation, identity, and religion impact the understanding of and equitable delivery of public policy. The examination of how identity development shapes our understanding of society and influences the decision-making process is central to students' shaping policy that is truly for the people. This course will equip students with the skills needed to analyze pluralism and draw conclusions about the application of various theories to public policy issues.

0101	Eric Luedtke	Seats (Total: 27)
	W 4:15pm - 6:45pm	TLF 1126
	Contact instructor or department for details.	
	<i>Restriction: Must be in the Rawlings Undergraduate Leadership Fellows Program.</i>	
0201	Alana Hackshaw	Seats (Total: 35)
	M 2:00pm - 4:30pm	TLF 1126

PLCY304**Evaluating Evidence: Finding Truth in Numbers**

Credits: 4

Grading Method: Regular

Prerequisite: STAT100. Restriction: Must be in a major in PLCY-School of Public Policy.

Enables students to understand the research done by others with a sufficiently skeptical eye to allow them to determine whether the findings of the research are valid given the assumptions made and methods used. This will involve, in part, thinking about the various problems in research design or conduct that could lead to faulty conclusions. It will also involve being able to differentiate between credible sources of information and those that are not objective. At the conclusion of the course, students should be able to differentiate objective evidence from political argumentation.

0101	Michael Busse	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	TLF 1101
	F 10:00am - 10:50am	TWS 0214 Discussion
0102	Michael Busse	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	KNI 1105
	F 11:00am - 11:50am	TWS 1106 Discussion
0103	Michael Busse	Seats (Total: 30)
	TuTh 5:00pm - 6:15pm	SQH 1105
	W 10:00am - 10:50am	SQH 1105 Discussion

PLCY306

Public Policy Analysis in Action

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must have earned a minimum of 60 credits; and must be in a major in PLCY-School of Public Policy.

Utilizes our unique location in the Washington, D.C. region to create a laboratory within which to analyze local, regional, national and international policy problems. Students will be put into teams and assigned to real and timely policy cases. The course will include meetings and field trips with local leaders in the field, ideally connected to the cases. Student will then expand and apply their use of policy analysis and evaluation skills to define those problems, analyze alternative responses, devise appropriate strategies for implementation, and evaluate the success of the proposed policy and implementation. The course will conclude with team presentations to local leaders and faculty. This distinctive course will serve to prepare students for their client- based senior capstone course.

0101	Michael Bodaken	Seats (Total: 35)
	TuTh 11:00am - 12:15pm	JMZ 2206

PLCY309

Internship in Political Institutions: State and Local

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Offers students supervised internship placements in state and local political or public policy organizations.

0101	Jennifer Littlefield	Seats (Total: 25)
	Contact instructor or department for details.	
0201	Susannah Washburn	Seats (Total: 25)
	Contact instructor or department for details.	

PLCY311**Women in Leadership**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: PUA311, PLCY311 or PUA359W. Formerly: PUA359W.

Examines the role of women in the leadership process including the participation of women as activists, voters, advocates, public leaders and as agents of change through various avenues including, among others, public service (elected and appointed), the media, community service, political organizations, and the nonprofit sector.

0101	Anne Kaiser	Seats (Total: 30)
	Tu 4:15pm - 6:45pm	TLF 1126

PLCY313**Advocacy in the American Political System**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: PUA313, PLCY313 or PUA359C. Formerly: PUA359C.

Introduces students to the creation of law through the legislative process with a special focus on the Maryland General Assembly.

0101	Gerard Evans	Seats (Total: 100)
	M 2:00pm - 4:30pm	ATL 2324

PLCY386**Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular

Prerequisite: Permission of PLCY-School of Public Policy. Credit only granted for: PLCY386 or PUA386. Formerly: PUA386.

0101	Nina Harris	Seats (Total: 10)
	Contact instructor or department for details.	

PLCY388 Special Topics in Public Policy

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit*Advanced special topics focusing on an interdisciplinary topic related to Public Policy.*

0101	Nina Harris	Seats (Total: 10)
	Contact instructor or department for details.	
0102	Jennifer Littlefield	Seats (Total: 20)
	M 1:00pm - 1:50pm	TWS 1313

PLCY388A Special Topics in Public Policy; Child and Family Policy Impact

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit*Advanced special topics focusing on an interdisciplinary topic related to Public Policy.*

Jointly offered with FMSC498P. Credit only granted for PLCY388A or FMSC4 98P. For poor and low-income families, federal programs such as Medicaid, Child care, SNAP and child nutrition programs are a lifeline every day. Some programs also have policies that consider more than income eligibility, such as number of hours of work, disability, and immigration status. Budget choices have a significant impact on policy intentions. Students will learn about and analyze the major federal programs and federal budgets for these policy areas; understand from data the impact of such programs and policies; and be introduced to significant advocacy efforts and considerations that shaped these policy decisions.

0101	Adele Robinson	Seats (Total: 24)
	TuTh 9:30am - 10:45am	TLF 1101

PLCY388D Special Topics in Public Policy; Innovation and Social Change: Do Good Now

Credits: 3

Grading Method: Regular,
Pass-Fail, AuditGeneral Education: DSSP,
SCIS*Advanced special topics focusing on an interdisciplinary topic related to Public Policy.*

Introduces students to the concept of social innovation while exploring the many mechanisms for achieving social impact. It is team-based, highly interactive and dynamic, and provides an opportunity for students to generate solutions to a wide range of problems facing many communities today. Deepens the students understanding of entrepreneurship and innovation practices by guiding them through the creation and implementation process as applied to a project idea of their choice.

0101	Joannie Tremblay-Boire	Seats (Total: 40)
	Tu 2:00pm - 3:15pm	ESJ 0215
	Th 2:00pm - 3:15pm	TLF 1126

PLCY388E Special Topics in Public Policy; Controversial Issues in Education Reform

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

Cross-listed with EDUC388E. Credit granted for PLCY388E or EDUC388E.

0101	John King	Seats (Total: 30)
	M 4:30pm - 7:15pm	ASY 3215

PLCY388G Special Topics in Public Policy; Global Perspectives on Leading and Investing in Social Change

Credits: 3 Grading Method: Regular, General Education: DSSP,
Pass-Fail, Audit SCIS

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

Today, philanthropic and nonprofit organizations play significant roles in shaping how public policy gets developed and implemented, as well as how change occurs in society. This course will define philanthropy as an exploration of how one develops a vision of the public good and then how a person or group can deploy resources to achieve a positive and lasting impact. During the semester, the class will go through the challenging and exciting process of ultimately granting approximately \$7,500 to an organization that we believe can use these resources to achieve an impact on an issue of international significance. Our class grant deliberations and decisions will ultimately lead us to confront, question, and sharpen our philanthropic values, decisions, and leadership skills.

0101	Angela Bies	Seats (Total: 40)
	Tu 2:00pm - 4:30pm	EGR 1104

PLCY388M Special Topics in Public Policy; Homeland Security and World Order

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

Protecting the Nation's homeland security involves the careful integration of many agencies' efforts and resources- both human and material. An important dynamic element in policy making is the significance of American Federalism to the national division of labor addressing security problems. Our federal structure creates unique prohibitions on the use of federal power, but also facilitates experimentation in meeting critical security and emergency preparedness requirements. This course will anchor the exploration of homeland security policy in an appreciation of America's federal history, and address responses to threats and challenges from critical infrastructure cybersecurity to counter terrorism and securing the US' borders and littoral economic interests.

0101	David Mussington	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	JMZ 0208

PLCY388N Special Topics in Public Policy; The United States and Israel: Likely or Unlikely Allies?

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

Cross-listed with ISRL329N and GVPT368B. Credit granted for ISRL329N, PLCY388N or GVPT368B.

0101	Scott Lasensky	Seats (Total: 35)
	W 4:00pm - 6:30pm	SQH 1117

PLCY388Q Special Topics in Public Policy; Introduction to International Security

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

This course will familiarize students new to international security policy with major concepts, debates, and challenges in the field. Some of today's most important problems, including potential conflicts between great powers, violence by governments against their own people and by terrorist organizations, and the disruptive effects of powerful new technology have existed in various forms for centuries.

0101	Charles Harry	Seats (Total: 25)
	TuTh 9:30am - 10:45am	CSI 3118

PLCY388T Special Topics in Public Policy; Undergraduate Teaching Assistant Directed Study

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Advanced special topics focusing on an interdisciplinary topic related to Public Policy.

0101	Nina Harris	Seats (Total: 10)
	Contact instructor or department for details.	

PLCY400

Senior Capstone

(Perm req)

Credits: 3

Grading Method: Regular

Prerequisite: PLCY306. Restriction: Permission of PLCY-School of Public Policy; and must have earned a minimum of 90 credits.

Public Policy students will take the skills and knowledge gained through their curriculum and apply them through their senior capstone course. Students will work in teams on problems and issues presented by outside clients, with guidance from faculty facilitators and interaction with the clients. Each team will work with the client to address a particular problem and produce a mutually agreed upon outcome. These hands on projects will advance students' understanding of the analytical, leadership, communication and problem solving skills necessary to address today's policy problems while allowing them to gain professional level experience that could contribute to their success in their post UMD endeavors. The course will conclude with an event that allows all teams to present their findings and outcomes to their client while being evaluated by faculty and public policy professionals.

0101	Juan Martinez Guzman	Seats (Total: 20)
	Th 2:00pm - 4:30pm	KEY 0119

PLCY401

Contemporary Issues in Public Policy

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must have earned a minimum of 90 credits.

An integrative course that allows policy students to explore the complexities of the policy-making process from the perspective of specific policy topics. They will learn about and discuss subject- based issues in a seminar format led by faculty and policy experts. Site visits to federal agencies, guest speakers, and round table sessions ensure that students receive a variety of real-world perspectives on their chosen policy area.

Cross-listed with HIST428C. Credit granted for PLCY401 or HIST428C.

0101	Claire Dunning	Seats (Total: 40)
	W 2:00pm - 4:30pm	VMH 1207
	<i>This course explores the history of urban inequality since 1945 and the policies, politics, and protests that shape it today.</i>	

PLCY610

Quantitative Aspects of Public Policy

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY610 or PUA610. Formerly: PUA610.

Introduces statistical methods needed for evaluating and choosing among policy options. Topics include probability; decision-making under uncertainty; the organization, interpretation, and visual display of complex data; prediction and inferences about causality; hypothesis testing; and linear and multiple regression. Develops analytical skills and the ability to apply theory to complex, real-world problems.

0201	Alec Worsnop	Seats (Total: 30)	
	W 4:15pm - 6:45pm	VMH 1203	
	M 4:15pm - 6:45pm	VMH 1207	Discussion
0401	Alec Worsnop	Seats (Total: 30)	
	Th 9:15am - 11:45am	PKT 1221	
	M 9:15am - 11:45am	VMH 1207	Discussion

PLCY611 Quantitative Analysis of Policy Issues

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY611 or PUA611. Formerly: PUA611.

Study of a series of problems and the development of quantitative techniques to describe or evaluate the problem. The organization and interpretation of complex data and its use for prediction and inference about casual effects. The definition of objectives, trade-offs among objectives, and allocation of resources to meet objectives. Sensitivity of outcomes to changing conditions.

0101	Seth Weissman	Seats (Total: 20)	
	W 4:15pm - 6:45pm	VMH 1107	
	M 4:15pm - 6:45pm	PKT 1224	Discussion

PLCY620 Political Analysis

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY620 or PUA620. Formerly: PUA620.

Examination of politics as a process for allocating scarce resources among claimants for public benefits. Comparison of the allocative model of politics with other distributive processes, such as markets. Comparison of the model with behavior of different political institutions, such as Congress and the presidency. Study of politics as a process with distinctive concepts of rationality. The translation of voter and interest group preferences into public choices. The impact of political decisions on competing constituencies.

Contact department for information to register for this course.

PLCY640 Microeconomic and Policy Analysis

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY640 or PUAF640. Formerly: PUAF640.

Applies intermediate microeconomic theory to public policy issues: resource allocation by firms and consumers; the response of economic agents to changes in incentives; market allocations in competitive and non-competitive environments; and market failures and government remedies. Uses extended case studies of particular issues in such areas as the environment (acid rain), international trade (tariffs), industry regulation (cable TV), and the provision of public goods (highways).

0101	Michael Busse	Seats (Total: 22)	
	W 1:30pm - 4:00pm	PKT 1221	
	Tu 4:15pm - 6:45pm	PKT 1221	Discussion
0201	Yueming Qiu	Seats (Total: 30)	
	Tu 1:30pm - 4:00pm	PKT 1221	
	Th 1:30pm - 4:00pm	PKT 1221	Discussion
0401	Yueming Qiu	Seats (Total: 40)	
	M 7:00pm - 9:30pm	VMH 1203	
	F 4:15pm - 6:45pm	VMH 1207	Discussion

PLCY641 Macroeconomics and Policy Analysis

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY641 or PUAF641. Formerly: PUAF641.

Studies the behavior of the economy as a whole: the level of national income, unemployment, and inflation; the vulnerability of the U.S. economy to external influences; possible federal influence over the level of economic activity; and the consequences for prices, employment and the U.S. trade deficit. Also examines possible U.S. policy responses to widespread debt crises in developing countries.

Contact department for information to register for this course.

PLCY650

Moral Dimensions of Public Policy

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY650 or PUA650. Formerly: PUA650.

Explores the moral issues involved in public policy questions; the limits and usefulness of decision-making tools; problems of choosing, justifying and using criteria to judge a program's success and suitability; ethical issues involving the welfare state and income distribution; and possible obligations beyond one's political community and generation.

Contact department for information to register for this course.

PLCY670

Public Budgeting & Financial Management

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLYC670 or PUA670. Formerly: PUA670.

Covers how governments raise, spend, borrow, and manage public funds. Reviews federal, state, and local budget processes and introduces analytical techniques including basic spreadsheet skills, evaluating alternative revenue sources, revenue and expenditure forecasting, cost allocation, capital budgeting, cost-benefit analysis, discounting and present value, bond analysis, cash management and intergovernmental finance.

Prerequisites PUAF 610 and 640.

Contact department for information to register for this course.

PLCY671

Public Sector Finance

Credits: 3 Grading Method: Regular, Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY671 or PUA671. Formerly: PUA671.

The goal of this course is to provide a useful overview of basic public sector financial management principles in a simulated managerial situation to midcareer students currently working in government and nonprofit organizations.

Contact department for information to register for this course.

PLCY688A

Topics in Public Policy; Comparative Political Institutions

Restricted to PLCY majors or permission of instructor.

0101	Miguel Gonzalez-Marcos	Seats (Total: 20)
	W 1:30pm - 4:00pm	VMH 1107
0201	Miguel Gonzalez-Marcos	Seats (Total: 15)
	W 7:00pm - 9:30pm	VMH 1203
0301	Miguel Gonzalez-Marcos	Seats (Total: 15)
	Tu 9:15am - 11:45am	VMH 1107

PLCY688I Topics in Public Policy; Macroeconomic Analysis

Credits: 2 Grading Method: Regular,
 Audit

Special topics in Public Policy.

Restricted to PLCY majors or permission of instructor.

0101	John Green	Seats (Total: 30)
	Meets August 26, 2019 - November 5, 2019	
	M 1:30pm - 4:00pm	VMH 1207
	W 9:15am - 11:45am	VMH 1207 Discussion
0201	Anthony Sanford	Seats (Total: 30)
	Meets August 26, 2019 - November 5, 2019	
	M 7:00pm - 9:30pm	VMH 1207
	Tu 7:00pm - 9:30pm	VMH 1207 Discussion

PLCY688M Topics in Public Policy; Acquisitions in National Security

Credits: 3 Grading Method: Regular,
 Audit

Special topics in Public Policy.

Contact department for information to register for this course.

PLCY688R Topics in Public Policy; Public Finance and Budgeting

Credits: 2 Grading Method: Regular,
 Audit

Special topics in Public Policy.

Restricted to PLCY majors or permission of instructor.

0101	Thomas Spreen Meets September 23, 2019 - December 6, 2019 Tu 1:30pm - 4:00pm	Seats (Total: 30) PKT 1224
0201	Thomas Spreen Meets September 23, 2019 - December 6, 2019 W 7:00pm - 9:30pm	Seats (Total: 30) VMH 1207

PLCY689A Public Policy Topics; Acquisitions: Concepts and Management

Credits: 3 Grading Method: Regular,
 Audit

Special Topics in Public Policy.

Restricted to PLCY majors or permission of instructor.

0101	William Lucyshyn W 4:15pm - 6:45pm	Seats (Total: 20) VMH 1101
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PLCY689J Public Policy Topics; Food Economics and Health

Credits: 3 Grading Method: Regular,
 Audit

Special Topics in Public Policy.

Restricted to PLCY majors or instructor permission.

0101	Alok Bhargava W 1:30pm - 4:00pm	Seats (Total: 20) VMH 1101
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PLCY689Q Public Policy Topics; Quantitative Methods for Evidence-based Policies

Credits: 3 Grading Method: Regular,
 Audit

Special Topics in Public Policy.

0101	Alok Bhargava W 9:15am - 11:45am	Seats (Total: 20) VMH 1101
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PLCY689Z Public Policy Topics; Strategic Management for NonProfit and Public Organizations

Credits: 3 Grading Method: Regular,
 Audit

Special Topics in Public Policy.

Restricted to PLCY majors or instructor permission.

0101	Robert Sheehan	Seats (Total: 30)
	W 7:00pm - 9:30pm	VMH 2505

PLCY692 Leadership Principles and Practices

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY692 or PUAF692. Formerly: PUAF692.

This course will introduce leadership principles and practices to students by focussing on the theory of leadership, different leadership themes and skills, and discussions with practitioners.

Contact department for information to register for this course.

PLCY698A Selected Topics in Public Affairs; Poverty Measurement and Alleviation

Credits: 3 Grading Method: Regular,
 Audit

Special topics that arise in public policy.

For PLCY majors only or permission of department.

0101	Douglas Besharov, Douglas Call	Seats (Total: 30)
	Th 4:15pm - 6:45pm	VMH 3330H

PLCY698C Selected Topics in Public Affairs; Intelligence and Policy: Executive, Congressional and Public Dimensions

Credits: 3 Grading Method: Regular,
 Audit

Special topics that arise in public policy.

Restriction: Must be in a major in PUAF-School of Public Policy.

0101	Elizabeth Duke	Seats (Total: 20)
	M 9:15am - 11:45am	VMH 1203

Credits: 3 Grading Method: Regular

For PUAF majors only or permission of department.

Credits: 3 Grading Method: Regular, Audit

Contact department for information to register for this course.

Credits: 3 Grading Method: Regular, Audit

Contact department for information to register for this course.

Credits: 3 Grading Method: Regular, Audit

Contact department for information to register for this course.

Credits: 3 Grading Method: Regular, Audit

Cross-listed with PHYS662. Credit only granted for PHYS662 or PLCY699B.

0101	Kavita Surana, Ellen Williams	Seats (Total: 9)
	TuTh 9:30am - 10:45am	IPT 1116

PLCY699D Selected Topics Public Policy; Examining Social Identity & Pluralism in Public Policy

Credits: 3 Grading Method: Regular,
 Audit

Special topics that arise in public policy.

Understanding how groups and individuals develop and coexist in society is an essential part of public policy. Using the classroom as a laboratory, students will explore identity development and how the intersections of race, class, gender, sexual orientation, and other identities shape perceptions that inform decision-making and policy development. From historical scholars to current day movement leaders, this course equips students with tools necessary to critically analyze pluralism, power, and identity; and the skills needed to shape meaningful and equitable public policy and working and civic environments for all.

0101	Nina Harris, Patricia Bory	Seats (Total: 20)
	W 1:30pm - 4:00pm	TLF 1126

PLCY699F Selected Topics Public Policy; Ethics of Public Administration

Credits: 1-3 Grading Method: Regular,
 Audit

Special topics that arise in public policy.

Contact department for information to register for this course.

PLCY699G Selected Topics Public Policy; Leadership in Groups and Organizations

Credits: 3 Grading Method: Regular,
 Audit

Special topics that arise in public policy.

Contact department for information to register for this course.

PLCY699J Selected Topics Public Policy; Pathways to Development

Credits: 3 Grading Method: Regular,
 Audit

Special topics that arise in public policy.

Restriction: Must be in a major in PUAf-School of Public Policy; or permission of PUAf-School of Public Policy.

Contact department for information to register for this course.

PLCY699M Selected Topics Public Policy; Acquisitions In National Security

Credits: 3 Grading Method: Regular,
 Audit

Special topics that arise in public policy.

Contact department for information to register for this course.

PLCY699O Selected Topics Public Policy; 21st Century Policy Challenges

Credits: 3 Grading Method: Regular,
 Audit

Special topics that arise in public policy.

Contact department for information to register for this course.

PLCY699R Selected Topics Public Policy; Critical Thinking and Analytic Methodology

Credits: 3 Grading Method: Regular,
 Audit

Special topics that arise in public policy.

Contact department for information to register for this course.

PLCY699T Selected Topics Public Policy; Terrorism Analysis: Tools and Practices

Credits: 3 Grading Method: Regular,
 Audit

Special topics that arise in public policy.

Contact department for information to register for this course.

PLCY699W Selected Topics Public Policy; Policy Engagement Project A

Credits: 2 Grading Method: Regular,
 Audit

Special topics that arise in public policy.

Restricted to PLCY majors or permission of instructor.

0201	Douglas Call, Douglas Besharov	Seats (Total: 20)
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	Th 7:00pm - 9:30pm	VMH 1207
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<i>Evaluation, performance measurement, and economic analysis projects (for students in any specialization). Must have taken, or take in the next Spring Semester, PLCY689E "Program Evaluation and Cost-Benefit Analysis".</i>		
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0211	Douglas Besharov, Douglas Call Th 7:00pm - 9:30pm <i>Evaluation, performance measurement, and economic analysis projects (for students in any specialization). Must have taken, or take in the next Spring semester, PLCY689E "Program Evaluation and Cost-Benefit Analysis".</i>	Seats (Total: 20) VMH 1207
0311	Anand Patwardhan Th 1:30pm - 4:00pm <i>Environmental and Energy projects.</i>	Seats (Total: 20) VMH 1101
0401	Jonas Siegel, Kathleen Vogel Th 1:30pm - 4:00pm <i>International security and economic policy projects.</i>	Seats (Total: 20) PKT 1224
0501	Matthew Regan, Margaret Brindle Th 1:30pm - 4:00pm <i>International development projects.</i>	Seats (Total: 20) VMH 1107
0521	Angela Bies Tu 9:15am - 11:45am <i>For approved students in India travel course.</i>	Seats (Total: 20) VMH 1101

PLCY699X Selected Topics Public Policy; Organizational Behavior

Credits: 3 Grading Method: Regular,
 Audit

Special topics that arise in public policy.

Contact department for information to register for this course.

PLCY700 U.S. Trade: Policy and Politics

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: PUA641, PUA620, and PUA640. Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY700 or PUA6700. Formerly: PUA6700.

Interplay between government and private interests in shaping official actions that affect international trade. Policy tools available to influence balance, magnitude, and composition of imports and exports. Evolution of executive, congressional and quasi-judicial government institutions under increased U.S. international trade exposure and trade deficit.

0101	Uri Dadush, William Reinsch, Susan Schwab	Seats (Total: 22)
	Th 9:15am - 11:45am	VMH 1101

PLCY711 Public Management and Leadership

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY711 or PUAF711. Formerly: PUAF711.

Reviews the managerial, political, and ethical problems faced by public sector managers and leaders, including setting an organization's goals, obtaining and protecting a program mandate, designing a service delivery system and implementing a new program.

Contact department for information to register for this course.

PLCY712 Analysis of Fiscal Conditions

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY712 or PUAF712. Formerly: PUAF712.

The financial operations of U.S. government at various levels, with emphasis on local governments. Practical problems in revenue management, including revenue forecasting and cash flow analysis; debt management operations, such as borrowing; intergovernmental financial operations, such as grants management and reporting requirements, and personnel management issues that have a direct bearing on governmental finances.

Contact department for information to register for this course.

PLCY715 Government and Non-Profit Accounting

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY715 or PUAF715. Formerly: PUAF715.

Basic accounting practices of governmental and non-profit organizations. Emphasis on presentation of data in assessing an organization's financial health, financial data by organizations, structuring of accounting information to achieve management control, way in which evolving national standards influence kinds of information organizations have to apply in the future.

Contact department for information to register for this course.

State and Local Government Budgeting

Contact department for information to register for this course.

Federal Budgeting: Policy and Process

Contact department for information to register for this course.

International Security Policy

Reviews the principal features of international security as currently practiced. Traces the evolution of contemporary policy beginning with the initiation of nuclear weapons programs during World War II. Particular emphasis is given to experience of the United States and Russia, since the historical interaction between these two countries has disproportionately affected the international security conditions that all other countries now experience.

0101	Sara Kutchesfahani	Seats (Total: 20)
	Tu 4:15pm - 6:45pm	VMH 1203

Terrorism and Democracy

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY722 or PUA722. Formerly: PUA722.

United States government's decision process for dealing with crises; the options available to a president for deterring and handling incidents of terrorism, and how a president can and should select between the options.

Contact department for information to register for this course.

PLCY724 Problems of Global Security

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY724 or PUA724. Formerly: PUA698W and PUA724.

Explores the international security implications of globalization, presenting evidence indicating that altered circumstances will eventually induce a major redesign of prevailing security arrangements. Includes three segments: 1) a review of the principal problems that have been the focus of established security policy and would be the context for any major adjustment of policy; 2) an assessment of relationships with the major countries where traditional problems are most acutely present; and 3) a review of the organizing principles that can be expected to emerge in the new situation.

Contact department for information to register for this course.

PLCY734 Foundations of Social Policy

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be in a major in PLCY-School of Public Policy. Credit only granted for: PLCY734 or PUA734. Formerly: PUA734.

Provides an overview of government's role in social policy and the history of the development of federal and state policies with respect to welfare, aging, education, and housing. Analyzes current federal institutions and legislation in the same policy areas and the demographic history of the United States. Develops skills in analytic writing and presentation of descriptive data.

Contact department for information to register for this course.

PLCY735 Health Policy

Credits: 3 Grading Method: Regular,
 Audit

Credit only granted for: PLCY735 or PUA735. Formerly: PUA735.

Analyzes the origins, history, status, and future of health care as problems in political and economic theory and as puzzles in policy formation. Considers current American reform controversies in the light of several disciplines and in comparison to foreign experiences and structures.

0101	Robert Sprinkle	Seats (Total: 20)
	M 4:15pm - 6:45pm	VMH 1203

PLCY741 Global Environmental Problems

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY741 or PUA741. Formerly: PUA741.

Suitability of analytic tools for examining global environmental problems, human overpopulation, land abuse, ozone depletion, climate change, acid rain, loss of biological diversity, the scarcity of food, fresh water, energy and nonfuel mineral resources, and health hazards of pollutants toxic metals and radiation.

0101	Irving Mintzer	Seats (Total: 40)
	Th 4:15pm - 6:45pm	VMH 1101

PLCY744 Environment and Development

Credits: 3 Grading Method: Regular,
 Audit

Credit only granted for: PLCY744 or PUA744. Formerly: PUA744.

Analyzes sustainable development and its conflicting interpretations. The dominant view, as expressed in the World Bank's 1992 World Development Report, is studied, along with some critical responses. Further readings on issues of population, consumption and development indicators.

0101	Matthew Regan, Thomas Hilde	Seats (Total: 20)
	W 7:00pm - 9:30pm	VMH 1107

PLCY752 Managing Differences:Resolving Conflict and Negotiating Agreements

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY752 or PUA752. Formerly: PUA752.

Enhances the student's negotiation and leadership skills for managing differences between individuals and groups. Students study the nature of conflict, learn how to handle two and multiparty conflicts, exerting leadership where there are no hierarchy leaders, and explore the impact of facilitators and mediators on the negotiating process. Blends skill building exercises and theory discussions about the behavior of groups and individuals in groups to understand negotiation dynamics.

0101	Charles Field	Seats (Total: 20)
	M 4:15pm - 6:50pm	VMH 1101

PLCY753 Advanced Negotiations

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: PUA752. Credit only granted for: PUA7698C, PUA7753 or PLCY753. Formerly: PUA7698C and PUA7753.

Deepens the student's negotiation and leadership skills for managing differences between individuals and groups. Cover conflict, escalation, dealing with intractable conflicts, sustaining agreements in inter-group conflicts, and the effects of trauma on negotiations.

Contact department for information to register for this course.

PLCY770 Seminar in Housing and Community Development Strategies

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be in a major in PLCY-School of Public Policy. Credit only granted for: PLCY770 or PUA770. Formerly: PUA770.

Detailed examination of community and social policy issues relating to the construction and management of affordable housing.

Contact department for information to register for this course.

PLCY771 Housing and Community Development Overview

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be enrolled in the executive training program sponsored by the Department of Housing and Urban Development. Credit only granted for: PLCY771 or PUA771. Formerly: PUA771.

An overview of the housing development process. Community development context, financial analysis, analytical tools including microcomputer applications, architectural and design issues, engineering constraints.

Contact department for information to register for this course.

PLCY772 Housing Finance

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be enrolled in the executive training program sponsored by the Department of Housing and Urban Development. Credit only granted for: PLCY772 or PUA772. Formerly: PUA772.

Fundamentals of housing investment analysis. Structuring feasibility analyses, appraisals, pro forma statements, return on investment, leverage analysis, underwriting ratios, taxation and syndication.

Contact department for information to register for this course.

PLCY773**Housing Clinic**

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be enrolled in the executive training program sponsored by the Department of Housing and Urban Development. Credit only granted for: PLCY773 or PUA773. Formerly: PUA773.

Issues and strategies applicable to urban, suburban, and rural areas. Field experience and a team exercise, using the case study method, will give an opportunity for concrete application of the concepts to a specific set of community problems.

Contact department for information to register for this course.

PLCY774**Asset Management**

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be enrolled in the executive training program sponsored by the Department of Housing and Urban Development. Credit only granted for: PLCY774 or PUA774. Formerly: PUA774.

Asset manager's role at each stage of the property's life cycle and property analysis, including cash flow debt and staffing. Topics include capital needs; major building systems, costs and useful lives; marketing and outreach; and anti-crime strategies. Field trips to problem properties to perform cost/benefit analysis, diagnose potential cures, and prepare action plans.

Contact department for information to register for this course.

PLCY780**The American Foreign Policy-Making Process**

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY780 or PUA780. Formerly: PUA780.

Survey and analysis of the governmental institutions and processes which shape U.S. global engagement on national security and international economic issues. Particular emphasis is given to executive-congressional relations and the broader domestic roots of foreign policy.

0101	Amy Gordon	Seats (Total: 20)
	M 1:30pm - 4:00pm	VMH 1107

PLCY781 International Economic Policy

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY781 or PUA781. Formerly: PUA781.

Issues and choices facing the United States in today's global economy. Primary, but not exclusive, emphasis is given to "competitive interdependence" among advanced industrial societies.

Contact department for information to register for this course.

PLCY783 Development and Foreign Aid

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY783 or PUA783. Formerly: PUA698Q and PUA783.

Examines the empirical, conceptual, and ethical dimensions of international development policies and U.S. foreign aid. What is the present character of development in poor countries/regions? How should development be conceived? What development strategies are best? What is and should be the purpose of U.S. foreign aid and development assistance?

0101	Margaret Brindle	Seats (Total: 20)
	Tu 7:00pm - 9:30pm	VMH 1107

PLCY790 Project Course

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in a major in PLCY-School of Public Policy; or permission of PLCY-School of Public Policy. Credit only granted for: PLCY790 or PUA790. Formerly: PUA790.

Students work at a sponsoring government agency or private firm researching problem of interest to sponsor and relevant to concentration. Emphasis on problem definition, organizing information, and both oral and written presentation of results.

Contact department for information to register for this course.

PLCY798A Readings in Public Policy

Credits: 1-3 Grading Method: Regular, Audit

Guided readings for discussions on public policy.

Contact department for information to register for this course.

PLCY798B Readings in Public Policy

Credits: 1-3 Grading Method: Regular, Audit

Guided readings for discussions on public policy.

Contact department for information to register for this course.

PLCY798F Readings in Public Policy; Moral Foundations of Intelligence

Credits: 3 Grading Method: Regular,
Audit

Guided readings for discussions on public policy.

For PUAF majors only or permission of department.

Contact department for information to register for this course.

PLCY798M Readings in Public Policy; Arms Control and Non-Proliferation Policy

Credits: 3 Grading Method: Regular, Audit

Guided readings for discussions on public policy.

Restricted to PLCY majors or permission of instructor

0101	Nancy Gallagher	Seats (Total: 20)
	Tu 1:30pm - 4:00pm	VMH 1101

PLCY798N Readings in Public Policy; Energy Economics

Credits: 3 Grading Method: Regular, Audit

Guided readings for discussions on public policy.

Restriction: Must be in a major in PUAF-School of Public Policy; or permission of PUAF-School of Public Policy.

0101	Yueming Qiu	Seats (Total: 20)
	M 1:30pm - 4:00pm	VMH 1101

PLCY798Y Readings in Public Policy; Nonprofit Management and Leadership

Credits: 3 Grading Method: Regular,
 Audit

Guided readings for discussions on public policy.

Restriction: PLCY major or permission of instructor.

0101	Joannie Tremblay-Boire	Seats (Total: 20)
	Th 4:15pm - 6:45pm	VMH 1107

PLCY798Z Readings in Public Policy; Qualitative Research Methods and Public Policy

Credits: 3 Grading Method: Regular,
 Audit

Guided readings for discussions on public policy.

Restricted to PLCY majors or instructor permission.

0101	Peter Reuter	Seats (Total: 20)
	M 4:15pm - 6:45pm	VMH 1107

PLCY898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

PLCY899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

PLSC Plant Sciences Fall 2019

PLSC101 Introductory Crop Science

Credits: 4 Grading Method: Regular,
 Pass-Fail, Audit CORE: LL General Education: DSNL

Major crop plants including: anatomy, physiology, morphology, history, use, adaptation, culture, improvement and economic importance.

Students must pay a \$50.00 laboratory materials fee.

0101	William Phillips	Seats (Total: 24)	
	MWF 10:00am - 10:50am	PLS 1140	
	M 11:00am - 12:50pm	PLS 1153	Lab
0102	William Phillips	Seats (Total: 24)	
	MWF 10:00am - 10:50am	PLS 1140	
	W 11:00am - 12:50pm	PLS 1153	Lab
0103	William Phillips	Seats (Total: 24)	
	MWF 10:00am - 10:50am	PLS 1140	
	W 1:00pm - 2:50pm	PLS 1153	Lab
0104	William Phillips	Seats (Total: 24)	
	MWF 10:00am - 10:50am	PLS 1140	
	M 1:00pm - 2:50pm	PLS 1153	Lab

PLSC115

How Safe is Your Salad? The Microbiological Safety of Fresh produce

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: LS General Education: DSNS, SCIS

Recommended: PLSC100, PLSC101, or BSCI105; or (BSCI170 and BSCI171).

As food is produced in larger quantities and made to travel longer distances, keeping our food safe in this day and age is an ever growing challenge. This course will focus on the question of what it takes to grow and maintain safe fruits and vegetables, as food travels along the path from the farm to your fork. Food safety of fresh produce will be discussed from the public health, agricultural, economical and policy perspectives.

0101	Shirley Micallef	Seats (Total: 30)	
	Tu 11:00am - 12:15pm	PLS 1130	
	Th 11:00am - 12:15pm	PLS 1119	Discussion
0102	Shirley Micallef	Seats (Total: 30)	
	Tu 11:00am - 12:15pm	PLS 1130	
	Th 12:30pm - 1:45pm	PLS 1119	Discussion

PLSC120

Mushrooms and Molds

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSNS

Students will learn about how essential fungi (mushroom, molds, and alikes) are in this world and how they affect our daily lives. They will learn how fungi interact with animals, plants and other organisms in positive and negative ways. Also, they will study the importance of fungi in biotechnology and food and how they have shaped many societies throughout history.

0101	Burkhard Schulz	Seats (Total: 25)
	TuTh 9:30am - 10:45am	PLS 1146
<i>The course will have a blended instruction format with online and in-class lectures, and one or two field outings and laboratories."</i>		

PLSC125

Feeding Nine Billion by 2050: Food Security and Crop Protection

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSNS, SCIS

A big question in global food security is "how can we feed 9 billion people in 2050?" This course will stimulate creative thinking about possible solutions particularly from the crop production perspective. The instructor will introduce the concept of food security and different dimensions of this complex issue, identify major constraints to food security, and discuss scientific approaches that may be used to meet the grand challenge. Emphasis will be placed on topical and controversial issues such as the impact of biofuel production and GM crops on food security, and novel strategies that can enhance crop protection for improving food security.

0101	Shunyuan Xiao, Burkhard Schulz	Seats (Total: 35)
	Tu 9:30am - 10:45am	MMH 1400
	Th 9:30am - 10:45am	PLS 1119 Discussion
0102	Shunyuan Xiao, Burkhard Schulz	Seats (Total: 35)
	Tu 9:30am - 10:45am	MMH 1400
	Th 9:30am - 10:45am	PLS 1113 Discussion
0103	Burkhard Schulz, Shunyuan Xiao	Seats (Total: 35)
	Tu 9:30am - 10:45am	MMH 1400
	Th 9:30am - 10:45am	PLS 1117 Discussion

PLSC201

Plant Structure and Function

Credits: 4 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PLSC100; or PLSC101. And CHEM103; or CHEM131. And CHEM132.

The relationship between plant structure and function and how the environment influences changes in the physiology to control higher plant growth and development are studied.

0101	Jianhua Zhu	Seats (Total: 20)	
	MWF 10:00am - 10:50am	PLS 1119	
	M 3:30pm - 6:15pm	PLS 1153	Lab
0102	Jianhua Zhu	Seats (Total: 20)	
	MWF 10:00am - 10:50am	PLS 1119	
	W 3:30pm - 6:15pm	PLS 1153	Lab

PLSC203

Plants, Genes and Biotechnology

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: LS General Education: DSNS

Prerequisite: BSCI103 or BSCI105; or (BSCI170 and BSCI171).

An overview of the history, genetics, and reproductive mechanisms for agronomic and horticultural plants that examines mechanisms of genetic improvement ranging from traditional plant breeding to tissue culture and genetic engineering. Social and political issues such as germplasm preservation and international intellectual property rights will also be discussed.

0101	Gary Coleman	Seats (Total: 23)	
	TuTh 2:00pm - 3:15pm	PLS 1162	

PLSC205

Introduction to Turf Science and Management

Credits: 4 Grading Method: Regular General Education: DSNL

Credit only granted for: PLSC205 or PLSC305. Formerly: PLSC305.

Principals of turf science and culture with emphasis on turfgrass anatomy, morphology, and physiology. The role of cultural interventions in achieving specific aesthetic and functional objectives is examined for multiple turf uses. Pest problems typically encountered in turfgrass management are also covered.

0101	Geoffrey Rinehart, Mark Carroll	Seats (Total: 25)	
	MWF 1:00pm - 1:50pm	PLS 1119	
	Tu 3:00pm - 5:00pm	PBR 1102	Lab

PLSC253

Woody Plants for Mid-Atlantic Landscapes I

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PLSC100.

A field and laboratory study of trees, shrubs, and vines used in ornamental plantings. Major emphasis is placed on native deciduous plant materials.

0101	Burkhard Schulz	Seats (Total: 24)	
	WF 1:00pm - 1:50pm	PLS 1140	
	F 2:00pm - 4:50pm	PLS 1153	Lab
0102	Burkhard Schulz	Seats (Total: 24)	
	WF 1:00pm - 1:50pm	PLS 1140	
	F 2:00pm - 4:50pm	PLS 1140	Lab
0103	Burkhard Schulz	Seats (Total: 24)	
	WF 1:00pm - 1:50pm	PLS 1140	
	F 2:00pm - 4:50pm	PLS 1140	Lab

PLSC389 Internship

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit will be given for practical work carried out at one or more horticultural, agronomic, landscape industries, botanical gardens, or arboreta under formally arranged internships.

0101	Mark Carroll	Seats (Total: 20)	
	W 9:00am - 9:50am	PLS 1119	
	Contact instructor or department for details.		

PLSC399 Special Problems in Plant Science

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Research projects in Plant Science including field, greenhouse, laboratory, studio and/or library studies. Research is conducted under the direction of a faculty member.

Contact department for information to register for this course.

PLSC404 Plant and fungal Metabolism

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: BSCI170 and BSCI171; or PLSC201. And CHEM231 and CHEM232; or CHEM237; or permission of AGNR-Plant Science & Landscape Architecture department.

An introduction to biochemistry and metabolism in plants and fungi, covering the biosynthesis of compartments in plant and fungal cells with biological molecules such as nucleic acids, amino acids and lipids. Energy flow processes such as photosynthesis, carbohydrate metabolism and respiration, are covered in the course. The integration of different pathways in plant development and responses to environmental stresses will be discussed.

0101	Yiping Qi	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	PLS 1168

PLSC405

Agroecology

Credits: 3 Grading Method: Regular

Prerequisite: At least one course in ecology; or permission of instructor. Recommended: BSCI361 or PLSC471; or any BSCI or ENST ecology course. Credit only granted for: PLSC405 or PLSC605.

Additional information: Class will be held on campus, with two day-long field trips to local farms.

How can we balance the multiple, and often competing objectives of sustainable agricultural intensification to promote both agricultural productivity and human wellbeing? The answer to this question requires a transdisciplinary, agroecological perspective. Agroecology is the integrative study of the ecology of the entire food system, encompassing ecological, economic and social dimensions. This course is designed to introduce various topics in agroecology (e.g. organic agriculture, biodiversity, the Farm Bill). We will take an ecosystems approach to the study of agriculture that will enable students to analyze the environmental, social, and economic interconnections within various types of agricultural systems locally and globally.

0101	Kate Tully	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	PLS 1146

PLSC420

Principles of Plant Pathology

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: CHEM131, CHEM132, and PLSC201; or students who have taken courses with comparable content may contact the department.

An introduction to the causal agents, nature and management of plant diseases with particular attention paid to economically important diseases of horticultural and agronomic crops.

0101	Nidhi Rawat	Seats (Total: 18)
	TuTh 1:00pm - 2:15pm	PLS 1111
	Tu 2:30pm - 5:15pm	PLS 1153 Lab

0102	Nidhi Rawat	Seats (Total: 18)	
	TuTh 1:00pm - 2:15pm	PLS 1111	
	Th 2:30pm - 5:15pm	PLS 1153	Lab

PLSC433 Technology of Fruit and Vegetable Production

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PLSC201, PLSC271, and ENST200; or students who have taken courses with comparable content may contact the department. Restriction: Junior standing or higher.

A critical analysis of research work and application of the principles of plant physiology, chemistry and botany to practical problems in the commercial production of fruit and vegetable crops.

0101	Diana Cochran	Seats (Total: 10)	
	MW 11:00am - 12:15pm	PLS 1119	
	W 1:00pm - 4:50pm	PLS 0123	Lab

PLSC453 Weed Science

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Weed identification, ecology, and control (cultural, mechanical, biological, and chemical methods).

0101	William Phillips	Seats (Total: 24)	
	TuTh 9:30am - 10:45am	PLS 1115	
	Tu 11:00am - 12:50pm	PLS 1153	Lab

PLSC608 Research Methods

(Perm req) Credits: 2 Grading Method: Regular,
Audit

An overview of research methods and applications related to plant sciences. Topics covered include current research advances, professional conduct and ethics, and preparation of grant proposals, manuscripts, and scientific presentations.

Prerequisite: permission of department. Repeatable to 6 credits if content differs. Credit will be granted for only one of the following: AGRO608, NRSC608, or PLSC608. Formerly NRSC608.

0101	Angus Murphy	Seats (Total: 20)	
	M 3:30pm - 5:30pm	PLS 5112	

PLSC608T**Research Methods; Supervised Teaching**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

An overview of research methods and applications related to plant sciences. Topics covered include current research advances, professional conduct and ethics, and preparation of grant proposals, manuscripts, and scientific presentations.

Prerequisite: permission of department.

0103	Angus Murphy	Seats (Total: 5)
Contact instructor or department for details.		
0104	Mark Carroll	Seats (Total: 5)
Contact instructor or department for details.		
6201	Jianhua Zhu	Seats (Total: 5)
Contact instructor or department for details.		

PLSC799**Master's Thesis Research**

Credits: 1-6

Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

PLSC898**Pre-Candidacy Research**

Credits: 1-8

Grading Method: Regular

Contact department for information to register for this course.

PLSC899**Doctoral Dissertation Research**

(Perm req)

Credits: 6

Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

PORT**Portuguese****Fall 2019****PORT104****Intensive Elementary Portuguese**

Credits: 4

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score.

Covers speaking, reading, writing, listening, and culture of Portuguese-speaking world.

0101	Adonis De Carvalho Borges	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	JMZ 0103
	W 11:00am - 11:50am	BPS 1232

PORT205 Intermediate Reading and Conversation in Portuguese I

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO

Prerequisite: PORT204; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Development of spoken Portuguese at intermediate level based on written assignments and exams on readings in a variety of genres.

0101	Adonis De Carvalho Borges	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	JMZ 1122

PORT234 Issues in Latin American Studies I

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO, D General Education: DSHS, DSHU, DVUP

Cross-listed with SPAN234, LASC234. Credit only granted for: LASC234, PORT234, or SPAN234.

Interdisciplinary study of major issues in Latin America and the Caribbean, including Latin America's cultural mosaic, migration and urbanization. Democratization and the role of religions. Taught in English.

0101	Sarah Dowman	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	JMZ 2206
0201	Sarah Dowman	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	HBK 0105

PORT386 Experiential Learning

(Perm req)

Credits: 3-6 Grading Method: Regular, Pass-Fail

Restriction: Permission of ARHU-School of Languages, Literatures, and Cultures department; and junior standing or higher.

Contact department for information to register for this course.

PORT388D Special Topics in Brazilian Studies; Race, Class and Gender in Brazil

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Exposes students to textual, visual and aural products to explore how Brazil has been shaped from within and abroad. Focuses on the broad meaning and impact on Brazilian culture and social formation. Taught in English.

This class introduces students to contemporary issues in Brazilian culture and society. It explores how discussions around LGBTQ rights, women's rights, race and social inequality play out in Brazil reshaping its culture and national identity. Taught in English.

0101	Ana Claudia Dos Santos Sao Bernardo	Seats (Total: 20)
	TuTh 2:00pm - 3:15pm	JMZ 0103

PORT399 Independent Study in Portuguese

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Specific readings in literature under the supervision of a faculty member of the department.

Contact department for information to register for this course.

PSYC Psychology Fall 2019

The following courses may involve the use of animals. Students who are concerned about the use of animals in teaching have the responsibility to contact the instructor, prior to course enrollment, to determine whether animals are to be used in the course, whether class exercises involving animals are optional or required and what alternatives, if any, are available. The Department of Psychology enforces course prerequisites. Students who do not meet the course prerequisites will be administratively dropped from the course.

PSYC100 Introduction to Psychology

Credits: 3 Grading Method: Regular, CORE: SB General Education: DSHS,
Pass-Fail, Audit DSNS

A basic introductory course, intended to bring the student into contact with the major problems confronting psychology and the more important attempts at their solution.

Discussion sections do not meet until after first lecture. Research requirement: may involve participation in research.

[Click here for more course information.](#)

0101	Benjamin Jones	Seats (Total: 30)
	W 4:00pm - 5:20pm	BRB 1101
	F 8:00am - 8:50am	BPS 1238 Discussion
	Class time/details on ELMs	ONLINE Discussion

0102	Benjamin Jones W 4:00pm - 5:20pm F 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 30) BRB 1101 BPS 1238 ONLINE	Discussion Discussion
0103	Benjamin Jones W 4:00pm - 5:20pm F 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 30) BRB 1101 BPS 0283 ONLINE	Discussion Discussion
0104	Benjamin Jones W 4:00pm - 5:20pm F 2:00pm - 2:50pm Class time/details on ELMs	Seats (Total: 30) BRB 1101 BPS 1236 ONLINE	Discussion Discussion
0105	Benjamin Jones W 4:00pm - 5:20pm F 3:00pm - 3:50pm Class time/details on ELMs	Seats (Total: 30) BRB 1101 BPS 1236 ONLINE	Discussion Discussion
0106	Benjamin Jones W 4:00pm - 5:20pm F 8:00am - 8:50am Class time/details on ELMs	Seats (Total: 30) BRB 1101 BPS 1238 ONLINE	Discussion Discussion
0107	Benjamin Jones W 4:00pm - 5:20pm F 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 30) BRB 1101 BPS 1238 ONLINE	Discussion Discussion
0108	Benjamin Jones W 4:00pm - 5:20pm F 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 30) BRB 1101 BPS 0283 ONLINE	Discussion Discussion
0109	Benjamin Jones W 4:00pm - 5:20pm F 2:00pm - 2:50pm Class time/details on ELMs	Seats (Total: 30) BRB 1101 BPS 1236 ONLINE	Discussion Discussion

0110	Benjamin Jones	Seats (Total: 30)		
	W 4:00pm - 5:20pm	BRB 1101		
	F 3:00pm - 3:50pm	BPS 1236	Discussion	
	Class time/details on ELMs	ONLINE	Discussion	
0201	Dylan Selterman	Seats (Total: 30)		
	Th 3:30pm - 4:50pm	BRB 1101		
	F 9:00am - 9:50am	BPS 1236	Discussion	
	Class time/details on ELMs	ONLINE	Discussion	
0202	Dylan Selterman	Seats (Total: 30)		
	Th 3:30pm - 4:50pm	BRB 1101		
	F 10:00am - 10:50am	BPS 0283	Discussion	
	Class time/details on ELMs	ONLINE	Discussion	
0203	Dylan Selterman	Seats (Total: 30)		
	Th 3:30pm - 4:50pm	BRB 1101		
	F 11:00am - 11:50am	HBK 0109	Discussion	
	Class time/details on ELMs	ONLINE	Discussion	
0204	Dylan Selterman	Seats (Total: 30)		
	Th 3:30pm - 4:50pm	BRB 1101		
	F 12:00pm - 12:50pm	BPS 0283	Discussion	
	Class time/details on ELMs	ONLINE	Discussion	
0205	Dylan Selterman	Seats (Total: 30)		
	Th 3:30pm - 4:50pm	BRB 1101		
	F 3:00pm - 3:50pm	BPS 0283	Discussion	
	Class time/details on ELMs	ONLINE	Discussion	
0206	Dylan Selterman	Seats (Total: 30)		
	Th 3:30pm - 4:50pm	BRB 1101		
	F 9:00am - 9:50am	BPS 1236	Discussion	
	Class time/details on ELMs	ONLINE	Discussion	
0207	Dylan Selterman	Seats (Total: 30)		
	Th 3:30pm - 4:50pm	BRB 1101		
	F 10:00am - 10:50am	BPS 0283	Discussion	
	Class time/details on ELMs	ONLINE	Discussion	

0208	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm	BRB 1101	
	F 11:00am - 11:50am	HBK 0109	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0209	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm	BRB 1101	
	F 12:00pm - 12:50pm	BPS 0283	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0210	Dylan Selterman	Seats (Total: 30)	
	Th 3:30pm - 4:50pm	BRB 1101	
	F 3:00pm - 3:50pm	BPS 0283	Discussion
	Class time/details on ELMs	ONLINE	Discussion
FC01	Scott Roberts	Seats (Total: 35)	
	MW 6:00pm - 7:15pm	ESJ 0215	
	<i>Restricted to students in Freshmen Connection.</i>		
FC02	Scott Roberts	Seats (Total: 35)	
	MW 7:30pm - 8:45pm	ESJ 0215	
	<i>Restricted to students in Freshman Connection.</i>		
FC03	Dirk Parham	Seats (Total: 35)	
	TuTh 4:30pm - 5:45pm	ESJ 2309	
	<i>Restricted to students in Freshmen Connection.</i>		

PSYC123

The Psychology of Getting Hired

Credits: 1 Grading Method: Regular

Restriction: Must not be in a Robert H. Smith School of Business degree program. Additional information: Cannot be used in place of BMGT367 toward a degree program in the Robert H. Smith School of Business.

Designed to introduce students to the science behind the hiring process and to prepare individuals with the academic and practical training required. Together we will explore psychological principles that influence the selection process and how individuals can apply them for the competitive edge that makes others Fear the Turtle!

0101	Lee Penn	Seats (Total: 100)	
	Class time/details on ELMs	ONLINE	

0201	Lee Penn	Seats (Total: 100)
	Class time/details on ELMs	ONLINE
0301	Lee Penn	Seats (Total: 100)
	Class time/details on ELMs	ONLINE

PSYC200

Statistical Methods in Psychology

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: FSAR

Prerequisite: PSYC100. And 1 course with a minimum grade of C- from (MATH107, MATH111, MATH120, MATH130, MATH136, MATH140, STAT100); or must have completed MATH220 with a minimum grade of C-. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

A basic introduction to quantitative methods used in psychological research.

Restricted to PSYC, ENSP and BSCI majors.

[Click here for sample course syllabus.](#)

0101	Tracy Tomlinson	Seats (Total: 28)
	TuTh 8:00am - 9:15am	BPS 1250
	M 9:00am - 9:50am	BPS 1238 Discussion
	Class time/details on ELMs	ONLINE Discussion
0102	Tracy Tomlinson	Seats (Total: 28)
	TuTh 8:00am - 9:15am	BPS 1250
	M 10:00am - 10:50am	BPS 1228 Discussion
	Class time/details on ELMs	ONLINE Discussion
0103	Tracy Tomlinson	Seats (Total: 28)
	TuTh 8:00am - 9:15am	BPS 1250
	M 12:00pm - 12:50pm	BPS 1238 Discussion
	Class time/details on ELMs	ONLINE Discussion
0104	Tracy Tomlinson	Seats (Total: 28)
	TuTh 8:00am - 9:15am	BPS 1250
	M 2:00pm - 2:50pm	BPS 0283 Discussion
	Class time/details on ELMs	ONLINE Discussion

0105	Tracy Tomlinson	Seats (Total: 28)	
	TuTh 8:00am - 9:15am	BPS 1250	
	M 1:00pm - 1:50pm	BPS 1238	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0201	Tracy Tomlinson	Seats (Total: 28)	
	TuTh 9:30am - 10:45am	BPS 1250	
	M 9:00am - 9:50am	BPS 1228	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0202	Tracy Tomlinson	Seats (Total: 28)	
	TuTh 9:30am - 10:45am	BPS 1250	
	M 10:00am - 10:50am	BPS 1232	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0203	Tracy Tomlinson	Seats (Total: 28)	
	TuTh 9:30am - 10:45am	BPS 1250	
	M 11:00am - 11:50am	PLS 1113	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0204	Tracy Tomlinson	Seats (Total: 28)	
	TuTh 9:30am - 10:45am	BPS 1250	
	M 2:00pm - 2:50pm	BPS 1228	Discussion
	Class time/details on ELMs	ONLINE	Discussion
0205	Tracy Tomlinson	Seats (Total: 28)	
	TuTh 9:30am - 10:45am	BPS 1250	
	M 1:00pm - 1:50pm	BPS 1236	Discussion
	Class time/details on ELMs	ONLINE	Discussion

PSYC210

Personality and Temperament: Developmental Origins, Brain Bases, and Clinical Implications

Credits: 3

Grading Method: Regular

Prerequisite: PSYC100. Restriction: Must be in Psychology program.

What is known about what makes each of us unique? How do these differences contribute to enduring differences in health & wealth? We will review recent research in humans and non-humans aimed at understanding the psychological & biological mechanisms underlying stable individual differences in personality. We will discuss the phylogenetic and ontogenetic origins of temperament, measurement issues, fundamental dimensions of personality across the lifespan, neurobiological substrates of temperament/personality, mechanisms contributing to stability and change, implications for psychopathology, & broader implications for public/macroeconomic policy.

0101	Alexander Shackman	Seats (Total: 117)
	MW 5:00pm - 6:15pm	BPS 1250

PSYC221 Social Psychology

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS, DSSP

Prerequisite: PSYC100.

The influence of social factors on the individual and on interpersonal behavior. Includes topics such as conformity, attitude change, person perception, interpersonal attraction, and group behavior.

[Click here for sample course syllabus.](#)

0101	Jennifer Wessel	Seats (Total: 150)
	TuTh 12:30pm - 1:45pm	BPS 1250
0201	Dylan Selterman	Seats (Total: 150)
	TuTh 11:00am - 12:15pm	HJP 0226
FCB1	Dylan Selterman	Seats (Total: 37)
	Tu 4:30pm - 5:45pm	HBK 0103
	F 11:30am - 12:45pm	PHY 4221 Discussion
	Class time/details on ELMs	ONLINE Discussion
<i>Restricted to students in Freshmen Connection.</i>		

PSYC289D Living the Good Life: The Psychology of Happiness

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS, SCIS

0101	Dylan Selterman	Seats (Total: 135)
	TuTh 2:00pm - 3:15pm	BPS 1250

PSYC300 Research Methods in Psychology Laboratory

Credits: 4 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: PSYC200. Restriction: Must be in Psychology program. Credit only granted for: PSYC300 or PSYC309R. Formerly: PSYC309R.

A general introduction and overview to the fundamental theoretical, conceptual, and practical issues in psychological research in both the laboratory and the field.

Restricted to PSYC majors only.

0101	Edward Bernat MW 11:00am - 11:50am Th 12:00pm - 1:50pm	Seats (Total: 16) TYD 0117 EGR 1102	Discussion
0102	Edward Bernat MW 11:00am - 11:50am Th 10:00am - 11:50am	Seats (Total: 16) TYD 0117 ATL 0201	Discussion
0103	Edward Bernat MW 11:00am - 11:50am Th 2:00pm - 3:50pm	Seats (Total: 16) TYD 0117 ATL 1106	Discussion
0104	Edward Bernat MW 11:00am - 11:50am F 10:00am - 11:50am	Seats (Total: 16) TYD 0117 BPS 0140	Discussion
0105	Edward Bernat MW 11:00am - 11:50am Th 12:00pm - 1:50pm	Seats (Total: 16) TYD 0117 PLS 1158	Discussion
0106	Edward Bernat MW 11:00am - 11:50am F 2:00pm - 3:50pm	Seats (Total: 16) TYD 0117 PLS 1158	Discussion
0201	Edward Bernat MW 1:00pm - 1:50pm Th 4:00pm - 5:50pm	Seats (Total: 16) BPS 1250 BPS 1232	Discussion
0202	Edward Bernat MW 1:00pm - 1:50pm F 10:00am - 11:50am	Seats (Total: 16) BPS 1250 BPS 1232	Discussion
0203	Edward Bernat MW 1:00pm - 1:50pm F 12:00pm - 1:50pm	Seats (Total: 16) BPS 1250 BPS 1232	Discussion

0204	Edward Bernat	Seats (Total: 16)	
	MW 1:00pm - 1:50pm	BPS 1250	
	F 2:00pm - 3:50pm	BPS 1232	Discussion
0205	Edward Bernat	Seats (Total: 16)	
	MW 1:00pm - 1:50pm	BPS 1250	
	W 4:00pm - 5:50pm	BPS 1232	Discussion
0206	Edward Bernat	Seats (Total: 16)	
	MW 1:00pm - 1:50pm	BPS 1250	
	F 12:00pm - 1:50pm	PLS 1162	Discussion

PSYC301 Biological Basis of Behavior

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSNS

Prerequisite: PSYC100. And BSCI170 and BSCI171; or BSCI105.

Recent advances in neuroscience are radically changing our understanding of how the brain works. The course first introduces the structure of the nervous system and the electrical and chemical signals at the core of brain function. Students then explore how the nervous system gathers and makes sense of information from the world around us. The last portion of the course focuses on plasticity, the concept that our brains are constantly changing, and its implications for nervous system development, memory, sexual behavior, sleep, and other complex behaviors.

Restricted to PSYC majors only.

[Click here for sample course syllabus.](#)

0101	Anna Li	Seats (Total: 100)	
	TuTh 9:30am - 10:45am	BPS 1243	

PSYC302 Fundamentals of Learning and Behavior

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: PSYC100. And BSCI170 and BSCI171; or BSCI105. Restriction: Restricted to psychology majors during the registration period. All other majors will be placed on a hold file. Credit only granted for: PSYC309F or PSYC302. Formerly: PSYC309F.

Overview of the fundamental types of learning that occur without formal instruction. The course covers fundamentals of classical and instrumental conditioning as studied in a variety of species in addition to more modern theories of learning. We will then explore how these principles influence diverse processes such as memory, attention, extinction, categorization, motivation, and in some cases, how they are implemented in the brain and disrupted in disease.

Contact department for information to register for this course.

PSYC303 Professional Development for Psychology Majors

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PSYC100; and must have completed 3 additional credits in PSYC courses. Or permission of BSOS-Psychology department. Restriction: Must be in a major within BSOS-Psychology department. Credit only granted for: PSYC309C or PSYC303. Formerly: PSYC309C.

An investigation of various career and graduate school opportunities available to psychology majors. Students will learn about a wide range of career fields, will learn how to utilize available resources to pursue career goals, and will take steps to advance their professional identity and development.

0101	Alexis Foley	Seats (Total: 50)
	Class time/details on ELMs	ONLINE

PSYC309R Special Topics in Psychology

(Perm req) Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Topics of current interest which represent extensions of or additions to topics covered in more general topical courses.

0101	Nazish Salahuddin	Seats (Total: 20)
	W 1:00pm - 1:50pm	BPS 1232

PSYC309U Introduction to Neuroscience

Credits: 3 Grading Method: Regular, General Education: DSNS
Pass-Fail, Audit

Prerequisite: BSCI170/BSCI171 with a grade of C- or higher; or an equivalent college-level introductory biology course.

Neuroscience is the study of how the nervous system provides perception of the world around us, plans and controls movement, and creates complex behaviors, memories, emotions, and thoughts. To start, you will learn about the nervous system's structure and how cells in the nervous system communicates with each other. We will examine our sensory capabilities and their roles in coordinated movement. You will see why sleep is so critical to emotional control, memory, and creativity. A major focus will be on the ability of the nervous system to change in structure and function throughout life. We will routinely discuss disorders of the nervous system to emphasize important concepts.

Prerequisite: BSCI170/BSCI171 with a grade of C- or higher; or an equivalent college-level introductory biology course. Neuroscience is the study of how the nervous system provides perception of the world around us, plans and controls movement, and creates complex behaviors, memories, emotions, and thoughts. To start, you will learn about the nervous system's structure and how cells in the nervous system communicates with each other. We will examine our sensory capabilities and their roles in coordinated movement. You will see why sleep is so critical to emotional control, memory, and creativity. A major focus will be on the ability of the nervous system to change in structure and function throughout life. We will routinely discuss disorders of the nervous system to emphasize important concepts.

0101	David Yager	Seats (Total: 49)
	TuTh 9:30am - 10:45am	TYD 2102

PSYC318D Community Interventions: Theory and Research; Community Interventions: Domestic Violence

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Survey and critical examination of a problem in the community and related interventions. Analysis of theory and research relevant to the problem. Historical and current trends discussed. A student who has completed PSYC309 must have permission of the department in order to register for PSYC318.

Jointly offered with WMST498A. For PSYC majors only. Theories and research related to domestic violence and interventions with abused women will be studied, and students will think critically regarding ethical and multicultural issues related to domestic violence. Community resources and strategies for ending domestic violence in the United States will be discussed.

0101	Karen O'Brien	Seats (Total: 35)
	MW 8:00am - 9:15am	PLS 1111

PSYC330 Child Psychopathology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PSYC100. Restriction: Must be in Psychology program. Credit only granted for: PSYC309B or PSYC330. Formerly: PSYC309B.

Etiology, diagnosis, prevention and treatment of emotional disorders of childhood and adolescence.

Restricted to PSYC majors only.

0101	Andrea Chronis-Tuscano	Seats (Total: 100)
	TuTh 11:00am - 12:15pm	BPS 1243

PSYC332 Psychology of Human Sexuality

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PSYC100.

A survey of historical and contemporary psychological views on a wide variety of sexual behaviors; theory and research bearing on the relationship between life span psychological development, psychological functioning, interpersonal processes and sexual behaviors; political and social issues involved in current sexual norms and practices.

Contact department for information to register for this course.

PSYC334 Psychology of Interpersonal Relationships

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PSYC100.

Research, theory and their practical applications pertaining to the development, maintenance and dissolution of human relationships. Processes critical to successful relating (e.g., communication, bargaining, conflict resolution), and issues associated with troubled dyadic relations with equal partners (e.g., jealousy, spouse abuse, divorce).

Restricted to PSYC majors only.

[Click here for sample course syllabus.](#)

0101	Colleen Kase	Seats (Total: 150)
	TuTh 9:30am - 10:45am	JMZ 0220

PSYC336 Psychology of Women

Credits: 3 Grading Method: Regular, , D General Education: DSHS
Pass-Fail, Audit

Prerequisite: PSYC100. Cross-listed with WMST336. Credit only granted for: PSYC336 or WMST336.

A survey of the biology, life span development, socialization, personality, mental health, and special issues of women.

Students will be expected to meet face-to-face during class time to complete small group work on 5-6 Fridays during the semester.

Click here for sample course syllabus.

0101	Monica Kearney	Seats (Total: 110)
	MW 12:00pm - 12:50pm	BPS 1250
	Class time/details on ELMs	ONLINE

PSYC338D Special Topics in Study Abroad III; Developmental Disorders

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

PSYC338L Special Topics in Study Abroad III; Dynamic Project Leadership

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

PSYC338N Special Topics in Study Abroad III; Neuroscience of Fear

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

PSYC338P Special Topics in Study Abroad III; Positive Psychology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

PSYC341 Introduction to Memory and Cognition

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PSYC200 and PSYC300.

An introduction to the basic concepts of cognitive psychology, the scientific study of mental processes. Topics will include perception, attention, memory, reasoning, and language, with an emphasis on how findings from cognitive psychology can inform real-life thinking (e.g., memory strategies for studying, pitfalls of multitasking, and how/why our memories can fail us).

Restricted to PSYC majors only.

[Click here for sample course syllabus.](#)

0101	Michael Dougherty	Seats (Total: 117)
	TuTh 12:30pm - 1:45pm	BPS 1243

PSYC353 Adult Psychopathology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PSYC100. Restriction: Must be in Psychology program.

The nature, diagnosis, etiology, and treatment of mental disorders.

Restricted to undergraduate PSYC students only.

[Click here for sample course syllabus.](#)

0101	Christopher Seitz-Brown	Seats (Total: 117)
	MW 8:00am - 9:15am	BPS 1243

PSYC354 Multicultural Psychology in the U.S.

Credits: 3 Grading Method: Regular, , D General Education: DSHS
Pass-Fail, Audit

Prerequisite: PSYC100.

What are the psychological implications of racism, sexism, homophobia and other structures of inequality in the United States? How do socio-cultural privilege and oppression influence individual and group thoughts, feelings, and behaviors? This course will take a current events focus to understanding multicultural and social justice issues in psychology with an emphasis on self-reflection, mental health, cross-cultural communication, and strategies for social change.

[Click here for sample course syllabus.](#)

0101	Monica Kearney	Seats (Total: 150)
	MW 10:00am - 10:50am	BPS 1250
	Class time/details on ELMs	ONLINE

PSYC355**Developmental Psychology**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PSYC100.

Survey of research and theory of psychological development from conception through childhood, stressing physiological, conceptual and behavioral changes, and the social and biological context in which individuals develop.

Restricted to undergraduate PSYC students only.

[Click here for sample course syllabus.](#)

0101	Jonathan Beier	Seats (Total: 150)
	TuTh 11:00am - 12:15pm	ESJ 2204

PSYC361**Survey of Industrial and Organizational Psychology**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PSYC100.

A general survey of the field of industrial organizational psychology including such topics as organizational entry (recruitment, selection, training, socialization); organizational psychology (motivation, leadership, job attitudes); and productivity in the work place (performance appraisal, absenteeism, turnover). The role that the larger environment plays in influencing work behaviors and work attitudes.

Restricted to PSYC majors only.

[Click here for sample course syllabus.](#)

0101	James Grand	Seats (Total: 75)
	TuTh 9:30am - 10:45am	TWS 0310

PSYC389**Experiential Learning**

(Perm req)

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Internship in psychology-related fields.

A course for undergraduate psychology majors to earn academic credit for an approved psychology-related internship experience. Information about the course may be obtained in BPS1107, or by contacting the instructor. Restricted to PSYC majors only.

0101	Steven Young	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

PSYC403 Animal Behavior

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Prerequisite: PSYC301.

Reviews the theoretical framework underlying the study of animal behavior. The genetic, hormonal and physiological basis of behavior, and the relation to ecological and evolutionary processes will be discussed using examples that range from invertebrate animals to humans.

For PSYC majors only.

0101	Jens Herberholz	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	BPS 0283

PSYC404 Introduction to Behavioral Pharmacology

Credits: 3 Grading Method: Regular,
 Pass-Fail, Audit

Prerequisite: PSYC301. Restriction: Must be in Psychology program.

Theoretical viewpoints on the interaction of drugs and behavior. Basic principles of pharmacology, the effects of drugs on various behaviors, experimental analysis of drug dependence and abuse, and neuropharmacology and behavior.

Contact department for information to register for this course.

PSYC407 Behavioral Neurobiology Laboratory

(Perm req) Credits: 4 Grading Method: Regular,
 Pass-Fail, Audit

Prerequisite: PSYC300 and PSYC301; and permission of instructor. Restriction: Must be in Psychology program; and must have earned a minimum of 85 credits.

How does the nervous system control behavior? We will address this question using simple behavioral experiments combined, in some exercises, with microsurgery and electrode recordings in the nervous system. Concepts studied will include CNS plasticity, the role of proprioception in controlling movement, cortical processing and the myth multitasking, sensory resolution by measuring receptive field sizes, activity of simple neural circuits controlling escape from predators, and the effects of neuromodulators on aggression. Animals used are all invertebrates.

Permission required (contact professor, ddyager@umd.edu)

[Click here for sample course syllabus.](#)

0101	David Yager	Seats (Total: 8)
	MW 9:00am - 9:50am	BPS 0140
	M 2:00pm - 5:00pm	BPS 0263 Lab
0201	David Yager	Seats (Total: 8)
	MW 9:00am - 9:50am	BPS 0140
	Tu 2:00pm - 5:00pm	BPS 0263 Lab
0301	David Yager	Seats (Total: 8)
	MW 9:00am - 9:50am	BPS 0140
	W 2:00pm - 5:00pm	BPS 0263 Lab

PSYC409 Topics in Neurosciences Seminar

(Perm req)

Credits: 1 Grading Method: Regular

Current research in neurosciences will be presented, read, and discussed. Emphasis will change each term.

For students in the neuroscience minor. Research presentations on selected topics in neuroscience. Review and discussion of background readings related to research presentations take place on alternate weeks. Restricted to students in the neuroscience minor.

0101	Douglas Schuweiler	Seats (Total: 38)
	W 3:30pm - 5:20pm	BPS 1243

PSYC420 Experimental Psychology: Social Psychology Laboratory

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PSYC300 and PSYC221. Restriction: Must be in Psychology program; and must have earned a minimum of 85 credits.

A laboratory course to provide a basic understanding of experimental method in social psychology and experience in conducting research on social processes.

[Click here for sample course syllabus.](#)

0101	Benjamin Jones	Seats (Total: 13)
	MW 10:00am - 10:50am	BPS 1236
	Th 10:00am - 11:50am	HBK 0125 Lab

0102	Benjamin Jones	Seats (Total: 12)
	MW 10:00am - 10:50am	BPS 1236
	Th 12:00pm - 1:50pm	HBK 0125 Lab
0201	Benjamin Jones	Seats (Total: 13)
	MW 11:00am - 11:50am	BPS 1238
	F 10:00am - 11:50am	PLS 1158 Lab
0202	Benjamin Jones	Seats (Total: 12)
	MW 11:00am - 11:50am	BPS 1238
	F 12:00pm - 1:50pm	BPS 0140 Lab

PSYC425

Psychology and Law

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PSYC100, PSYC200, and PSYC300. Restriction: Must be in Psychology program. Credit only granted for: PSYC309K, PSYC325, or PSYC425. Formerly: PSYC309K.

An introduction to the intersection of psychology and the criminal justice system, known as the field of legal psychology. The material covered will span the course of the criminal justice process and examine each aspect from a psychological perspective beginning with profiling and moving on to eyewitness memory and judgements through perpetrator memories and interrogation techniques. These aspects will be evaluated with a research lens as well as an applied outlook.

0101	Tracy Tomlinson	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	BPS 1232

PSYC432

Counseling Psychology: Theories, Research, and Practice

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PSYC200.

Analysis of research and intervention strategies developed and used by counseling psychologists. Historical and current trends in content and methodology.

Restricted to undergraduate PSYC majors only. Students will be expected to meet face-to-face during class time to complete small group work on 5-6 Fridays during the semester.

[Click here for sample course syllabus.](#)

0101	Nazish Salahuddin MW 10:00am - 10:50am Class time/details on ELMs	Seats (Total: 75) TYD 1101 ONLINE
0201	Nazish Salahuddin MW 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 75) TYD 2106 ONLINE

PSYC433

Basic Helping Skills: Research and Practice

Credits: 4

Grading Method: Regular

Prerequisite: PSYC300. Restriction: Must be in Psychology program; and must have earned a minimum of 85 credits; and must not have completed or be concurrently enrolled in EDCP 310. Credit only granted for: EDCP210, EDCP310, or PSYC433.

Theories and research regarding effective helping relationships, with a focus on applications to counseling and psychotherapy. Students will practice helping skills with each other and will conduct research projects evaluating their helping skills. Students should be willing to talk about personal issues in class. Attendance in labs is mandatory and contributes to the course grade; thus, students should only enroll in a lab section that they will be able to attend consistently.

Restricted to undergraduate PSYC majors who have completed 85 credits.

[Click here for sample course syllabus.](#)

0101	Monica Kearney M 2:00pm - 3:50pm W 9:00am - 10:50am	Seats (Total: 12) BPS 1243 BPS 1228	Lab
0102	Monica Kearney M 2:00pm - 3:50pm W 11:00am - 12:50pm	Seats (Total: 12) BPS 1243 BPS 1234	Lab
0103	Monica Kearney M 2:00pm - 3:50pm Th 4:00pm - 5:50pm	Seats (Total: 12) BPS 1243 BPS 1234	Lab
0104	Monica Kearney M 2:00pm - 3:50pm W 3:00pm - 4:50pm	Seats (Total: 12) BPS 1243 BPS 1234	Lab

0105	Monica Kearney M 2:00pm - 3:50pm Th 2:00pm - 3:50pm	Seats (Total: 12) BPS 1243 BPS 1234	Lab
0106	Monica Kearney M 2:00pm - 3:50pm F 9:00am - 10:50am	Seats (Total: 12) BPS 1243 BPS 1234	Lab
0107	Monica Kearney M 2:00pm - 3:50pm F 11:00am - 12:50pm	Seats (Total: 12) BPS 1243 BPS 1234	Lab
0108	Monica Kearney M 2:00pm - 3:50pm F 1:00pm - 2:50pm	Seats (Total: 12) BPS 1243 BPS 1234	Lab
0109	Monica Kearney M 2:00pm - 3:50pm F 1:00pm - 2:50pm	Seats (Total: 12) BPS 1243 BPS 1228	Lab

PSYC436

Introduction to Clinical Psychology: From Science to Practice

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PSYC300.

Critical analysis of clinical psychology, with particular emphasis on current developments and trends.

Restricted to undergraduate PSYC majors only.

[Click here for sample course syllabus.](#)

0101	Andres De Los Reyes MWF 11:00am - 11:50am	Seats (Total: 75) TYD 1102
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PSYC440

Experimental Psychology: Cognitive Processes and Legal Applications

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PSYC341 and PSYC300. Restriction: Must be in Psychology program; and must have earned a minimum of 85 credits.

A survey of the content, models, and methods in cognitive psychology with an emphasis on attention and encoding, recall, recognition, judgment, signal detection theory, and applying cognitive theories to situations in the legal system. Students integrate scientific theories with real-life legal situations. Course topics include research methodology in assessing and addressing cognitive mechanisms and how this understanding may help eyewitness and victim recall and recognition, perpetrator recall, assessing scientific theories of repression, and real life examples.

0101	Tracy Tomlinson	Seats (Total: 24)
	TuTh 2:00pm - 3:15pm	BPS 1232
	W 1:00pm - 4:00pm	BPS 0140 Lab

PSYC442 Psychology of Language

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PSYC300 and PSYC341. Restriction: Must be in Psychology program.

Introductory survey of the psychology of language, focusing on the cognitive processes that enable us to produce and understand language. Topics include speech perception, speech production, syntactic processing, language development, language disorders, and the brain bases of language.

Contact department for information to register for this course.

PSYC464 Psychology of Leaders in Work Organizations

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: PSYC200 and PSYC361.

The psychological assumptions and implications of various theories of management and leadership. Selections and training; development of careers; influence processes; change of managerial behavior; and the impact of the larger environment, nature of product or service, and organization structure on managerial behavior.

Restricted to PSYC majors only.

0101	Paul Hanges	Seats (Total: 40)
	TuTh 11:00am - 12:15pm	BPS 0283

PSYC468H Field Experience and Special Assignments in Honors

(Perm req) Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

An individual experience arranged by the honors student and his or her supervisor. A proposal submitted to the honors faculty in the semester preceding registration for the course should state the activities anticipated and the method of evaluation.

5008	Karen O'Brien	Seats (Total: 1)
Contact instructor or department for details.		

PSYC469H Honors Thesis Proposal Preparation

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Development of honors thesis proposal by preliminary research and literature review. Presentation of formal proposal to the thesis committee.

Restricted to undergraduate PSYC majors only.

Contact department for information to register for this course.

PSYC478 Independent Study in Psychology

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Information about independent study may be obtained in BPS 1121. Restricted to PSYC majors (20010) only. The student must have completed 9 hours in PSYC with at least a 3.0 GPA in PSYC and a 2.8 overall GPA.

Contact department for information to register for this course.

PSYC479 Special Research Problems in Psychology

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Information about research credit may be obtained in BPS 1121. Restricted to PSYC majors (20010) only. The student must have completed 9 hours in PSYC with at least a 3.0 GPA in PSYC and a 2.8 overall GPA.

Contact department for information to register for this course.

PSYC489D Advanced Special Topics in Psychology; Data Science for Psychology and Neuroscience I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Treatment of a specialized topic in psychology.

Prerequisites: MATH120, MATH130, or MATH140; and PSYC300. An introduction to programming (in R and/ or Python) and statistics from a computational perspective. Highly hands-on with a heavy emphasis on project work, and a focus on application and execution over theory, which is introduced at a high level only where needed. Restriction: PSYC majors only (until the first day of classes).

0101	Alec Solway	Seats (Total: 24)
	TuTh 11:00am - 12:15pm	BPS 0140

PSYC489G Advanced Special Topics in Psychology; Hormones and Behavior

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Treatment of a specialized topic in psychology.

Prerequisite: PSYC301 or equivalent. For students who have not had PSYC301, written permission of the instructor and department is required. Restricted to PSYC majors only. Jointly offered with NACS728O. Credit only granted for PSYC489G or NACS728O. Formerly: PSYC309Z.

0101	Erica Glasper Andrews	Seats (Total: 40)
	TuTh 9:30am - 10:45am	BPS 1238

PSYC489U Advanced Special Topics in Psychology; Health Psychology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Treatment of a specialized topic in psychology.

An examination of how psychological, biological, and social factors impact physical health and well-being. Topics covered include stress, health disparities, disease states, pain, addiction, and primary prevention.

0101	Kristen Hamilton	Seats (Total: 75)
	TuTh 3:30pm - 4:45pm	BPS 1243

PSYC489V Advanced Special Topics in Psychology; The Neuroscience of Emotion and Cognition

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Treatment of a specialized topic in psychology.

0101	Luiz Pessoa	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	BPS 1232

PSYC489X Advanced Special Topics in Psychology; Musical Perception and Cognition

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Treatment of a specialized topic in psychology.

For students enrolled in the Psychology Honors program. To obtain permission to register, email lkader@umd.edu.

0101	Robert Slevc	Seats (Total: 25)
	TuTh 9:30am - 10:45am	BPS 0140

PSYC499H Honors Thesis Research

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

In addition to the department and instructor, the director of the honors program may be contacted to obtain a section number. Prerequisite: permission of the thesis advisor. Permission may be obtained in BPS 1147. Restricted to undergraduate PSYC majors only.

Contact department for information to register for this course.

PSYC601 Quantitative Methods I

(Perm req)

Credits: 4 Grading Method: Regular,
Audit

Prerequisite: PSYC200; or students who have taken courses with comparable content may contact the department.

A basic course in quantitative/mathematical analysis and statistical methods in psychology with an emphasis on conceptual understanding. Topics include issues in measurement, probability theory, statistical inference and hypothesis testing, parameter estimation, bivariate regression, and correlation.

For PSYC majors only. For all non-psychology graduate students, written permission of the instructor and department is required.

0101	Alison Robey	Seats (Total: 23)
	TuTh 9:00am - 10:50am	BPS 0283
	Th 5:00pm - 7:00pm	BPS 0140 Lab

PSYC603 Introduction to Industrial and Organizational Psychology

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: PSYC603 or PSYC730. Formerly: PSYC730.

Advanced survey of industrial-organizational psychology, including selection, training, motivation, group processes, leadership, organizational psychology, and organizational theory. Readings stressed and seminar time will be used for lectures, discussion and integration of the reading materials.

0101	James Grand Th 2:00pm - 4:30pm	Seats (Total: 20) HBK 0108
PYP1	Kenneth Yusko Meets August 26, 2019 - November 15, 2019 M 4:30pm - 8:30pm Class time/details on ELMs	Seats (Total: 40) BPS 1140B ONLINE <i>Restricted to students in Industrial/Organizational Psychology.</i>

PSYC622 Research Methods in Clinical Psychology

Credits: 3 Grading Method: Regular

Restriction: Permission of instructor. Credit only granted for: PSYC622 or PSYC718. Formerly: PSYC718.

Examines issues and strategies in conceptual systems, designs and methodologies of current research in clinical and community psychology. Readings include critical analyses of published research. Course requirements include preparation of a research proposal for a thesis level study.

PCC1	Christina Danko Meets August 26, 2019 - November 15, 2019 Tu 6:00pm - 9:10pm	Seats (Total: 45) BPS 0283 <i>Restricted to students in Clinical Psychological Science program.</i>
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PSYC624 Adult Psychopathology

(Perm req) Credits: 3 Grading Method: Regular

Restriction: Permission of instructor; and must be in one of the following programs (Psychology (Master's); Psychology (Doctoral)). Credit only granted for: PSYC624 or PSYC719. Formerly: PSYC719.

Examines the scientific and clinical literature relevant to normal and pathological behavior in adults and associated nosological systems for categorizing psychopathology. Issues relevant to etiology, differential diagnosis, and treatment planning are also considered.

0101	Christopher Seitz-Brown	Seats (Total: 20)
	W 9:30am - 12:00pm	BPS 1103

PSYC629B Clinical Laboratory; Assessment Practicum

Credits: 1-3 Grading Method: Sat-Fail

Provides advanced supervised experience in the delivery and supervision of mental health interventions targeted to individuals. Supervised work with clients is required.

0101	Mary Byrne	Seats (Total: 10)
	Contact instructor or department for details.	

PSYC629C Clinical Laboratory; Adult Therapy Practicum

Credits: 1-3 Grading Method: Sat-Fail

Provides advanced supervised experience in the delivery and supervision of mental health interventions targeted to individuals. Supervised work with clients is required.

0101	Lea Dougherty	Seats (Total: 10)
	Contact instructor or department for details.	

PSYC629D Clinical Laboratory; Child and Adolescent Therapy Practicum

Credits: 1-3 Grading Method: Sat-Fail

Provides advanced supervised experience in the delivery and supervision of mental health interventions targeted to individuals. Supervised work with clients is required.

0101	Elizabeth Malesa	Seats (Total: 10)
	Contact instructor or department for details.	

PSYC638 Externship in Professional Psychology

Credits: 1-3 Grading Method: Sat-Fail

Approved appointment as an extern in a mental health setting.

For PSYC majors only.

0101	Lea Dougherty	Seats (Total: 20)
	Contact instructor or department for details.	
0201	Derek Iwamoto	Seats (Total: 25)
	Contact instructor or department for details.	

PSYC639**Internship in Professional Psychology**

Credits: 1 Grading Method: Sat-Fail

This seminar combines involvement with a program approved appointment as an intern in a mental setting with a supervisory review of the training experience.

For PSYC majors only.

0101	Lea Dougherty	Seats (Total: 20)
Contact instructor or department for details.		

PSYC643**Ethical and Professional Issues in Clinical Psychology**

Credits: 3 Grading Method: Regular

Restriction: Permission of instructor; and must be in one of the following programs (Psychology (Master's); Psychology (Doctoral)). Credit only granted for: PSYC643 or PSYC719. Formerly: PSYC719.

An overview of the ethical and professional issues involved in psychological research, instruction, and practice, with special attention to advocacy and ethical decision making regarding a variety of primary, secondary, and tertiary clinical/community interventions.

0101	Mary Byrne	Seats (Total: 20)
	W 1:00pm - 3:30pm	BPS 2114B
PCC1	Andrea Chisolm	Seats (Total: 35)
	Meets August 26, 2019 - November 15, 2019	
	Tu 6:00pm - 9:10pm	BPS 1140B
<i>Restricted to students in Clinical Psychological Science program.</i>		

PSYC644**Basic Foundation of Clinical Interventions**

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of instructor; and must be in one of the following programs (Psychology (Master's); Psychology (Doctoral)).

General introduction to behavior theory and the basic behavioral principles that underlie behavior therapy. Provides an introduction to the philosophical, theoretical and empirical contributions of basic behavior analysis as they relate to behavior therapy, including examples of how behavior therapy is disconnected from its roots.

PCC1	Andrea Chisolm	Seats (Total: 40)
	Meets August 26, 2019 - November 15, 2019	
	Th 6:00pm - 9:10pm	BPS 1140B
	<i>Restricted to students in Clinical Psychological Science program.</i>	

PSYC651 Writing and Critical Thinking

Credits: 3 Grading Method: Regular

Restriction: Must be enrolled in and have completed 4 terms of the Clinical Psychological Science MPS program.

A capstone experience to integrate knowledge learned throughout the program and improve critical thinking and research writing skills. This will be done through the production of a major research paper in an area relevant to the current or future career goals of the student and by emphasizing critical thinking skills.

PCC1	Christina Danko	Seats (Total: 35)
	Meets August 26, 2019 - November 15, 2019	
	Th 6:00pm - 9:10pm	BPS 1236
	<i>Restricted to students in Clinical Psychological Science program.</i>	
PCC2	Jack Blanchard	Seats (Total: 40)
	Meets August 26, 2019 - November 15, 2019	
	Th 6:00pm - 9:10pm	Location: TBA
	<i>Restricted to students in Clinical Psychological Science program.</i>	

PSYC652 Analytical Thinking: Statistical Methods at Work

Credits: 3 Grading Method: Regular,
Audit

Additional information: Students will be taught how to conduct analyses in R, SPSS, SAS, Stata, and excel; students are encouraged to practice analyses on at least two of these programs.

Personal and organizational growth begins with asking and answering great questions. Correspondingly, this course begins with demonstrations of how to translate business questions into research questions. Statistical methods used to answer business questions are taught first conceptually, then computationally using statistical software. This course emphasizes interpreting results, the regression model, and other issues salient to business research, such as handling large datasets. Students will be provided with a simulated dataset that they will use in learning how to frame and answer business questions using the techniques covered in this course. At the conclusion of this course, students will be required to provide an executive-level presentation on the business question, their findings, and resulting implications.

PYP1	Juliet Aiken	Seats (Total: 40)
	Meets August 26, 2019 - November 15, 2019	
	M 4:30pm - 8:30pm	BPS 1140B
	Class time/details on ELMs	ONLINE
<i>Restricted to students in the Industrial/Organizational Psychology program.</i>		

PSYC660 Performance Management, Compensation, and Benefits

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in the Master of Professional Studies in Industrial/Organizational Psychology Program.

This course draws together content on organizational behavior, selection, assessment, development, employee relations, and compensation, among other topics. Students in this course will learn about how to align organizational reward systems, including selection, development, performance appraisal, feedback, and compensation systems. This course will pull from current organizational research and theory on issues ranging from work motivation, employee retention, and feedback processes to issues of organizational strategy and culture.

PYP1	Kenneth Yusko	Seats (Total: 40)
	Meets August 26, 2019 - November 15, 2019	
	M 4:30pm - 8:30pm	ESJ 1309
	Class time/details on ELMs	ONLINE
<i>Restricted to students in the Industrial/Organizational Psychology program.</i>		

PSYC661 Practicum in IO Psychology

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: PSYC603, PSYC652, PSYC653, and PSYC654. Restriction: Must be in the Master of Professional Studies in Industrial/Organizational Psychology Program.

In this practicum, students will work on IO-related tasks in an organization and will have the opportunity to apply what they have learned in class to real-world problems. Students will write a reflection paper reviewing what skills they have applied - and developed - while completing this practicum.

PYP1	Shannel Winslow	Seats (Total: 40)
	Meets August 26, 2019 - November 15, 2019	
	M 4:30pm - 8:30pm	ESJ 1309
	Class time/details on ELMs	ONLINE
	<i>Restricted to students in the Industrial/Organizational Psychology program.</i>	

PSYC700 Theories and Strategies of Counseling Psychology

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of BSOS-Psychology department. Credit only granted for: PSYC700 or PSYC711. Formerly: PSYC711.

Introduction to the professional field, examination of pertinent scientific and philosophical backgrounds, and survey of the major theories, principles, and training models in counseling. Correlated laboratory analogue experiences in dyadic and group interrelationships.

0101	Clara Hill	Seats (Total: 8)
	M 2:00pm - 4:50pm	BPS 2145

PSYC738L Seminar in Industrial/Organizational Psychology; Organizational Leadership

Credits: 3 Grading Method: Regular,
Audit

An occasional advanced seminar covering specialized topics.

This course covers the history and currently dominant theories in the field of leadership. We will discuss the social influences, cognitive processes, and organizational contingencies that leaders use to influence others. Both the positive (e.g., transformational, authentic) and negative (e.g., abusive, toxic) aspects of leadership will be discussed as will issues of measurement.

0101	Paul Hanges	Seats (Total: 20)
	W 1:00pm - 3:30pm	ANS 0402

PSYC7980 Graduate Seminar; Diversity in Organizations

Credits: 3 Grading Method: Regular,
Audit

Focus is placed on issues surrounding diversity and the interactions of stigmatized and non-stigmatized individuals, with an emphasis on the context of work. Issues related to diversity and discrimination at work involve several key players, including the person(s) being stigmatized, the person doing the stigmatizing, the bystander(s) witnessing stigmatization of others, and the organization. Course readings address each of these perspectives, along with an introductory unit that outlines key concepts of diversity.

0101	Jennifer Wessel	Seats (Total: 10)
	Tu 2:00pm - 4:30pm	HBK 0108

PSYC799 Master's Thesis Research; MASTERS THESIS RSRCH

Credits: 1-6 Grading Method: Regular

For PSYC majors only. For all non-psychology graduate students, written permission of the instructor and department is required.

Contact department for information to register for this course.

PSYC819D Seminar in Personality and Development; Attachment Theory, Research, and Clinical Implications

Credits: 3 Grading Method: Regular,
Audit

An advanced seminar covering specialized topics.

0101	Jude Cassidy	Seats (Total: 10)
	Th 12:30pm - 3:00pm	BPS 1103

PSYC888A Research Methods in Psychology; Developmental Seminar

Credits: 1-3 Grading Method: Regular,
Audit

0101	Tracy Riggins	Seats (Total: 10)
	Contact instructor or department for details.	

PSYC889 Research Methods in Psychology; Cognitive and Neural Systems Seminar

Credits: 1 Grading Method: Regular,
Audit

0201	Matthew Roesch	Seats (Total: 10)
	W 10:00am - 10:50am	BPS 0283

PSYC898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

PSYC899 Doctoral Dissertation Research; Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

For PSYC majors only. For all non-psychology graduate students, written permission of the instructor and department is required.

Contact department for information to register for this course.

RDEV Real Estate Development Fall 2019

RDEV250 People, Planet, and Profit: Building Sustainable Places

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Cross-listed with ARCH271. Credit only granted for: ARCH271 or RDEV250.

An introduction to the four disciplines represented in the School: architecture and urban design, community planning, historic preservation, and real estate development, that work to create a more sustainable environment for the future to create a more sustainable environment for the future using our interpretation of the quadruple bottom line: socio-cultural, economic, environmental, and design sustainability. Students will be provided with an understanding of the fundamental scholarship and processes of each of these disciplines and examine the intersections between them. Additionally, they will learn by applying the approaches of the four disciplines through a series of field studies.

0101	Georgeanne Matthews	Seats (Total: 90)
	TuTh 3:30pm - 4:45pm	ESJ 1224

RDEV270 Tax and Accounting for Real Estate Development

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development; and must not be in a major in the Robert H. Smith School of Business; and must not have completed BMGT210, BMGT220, or BMGT221.

An understanding of key tax and accounting principles and how they impact real estate development for students in the minor in real estate development is the purpose of this course. This course is geared for science, arts and humanities students who otherwise in their major would not take an accounting course as part of their major.

0101	Leslie Mostow	Seats (Total: 22)
	Tu 7:00pm - 9:40pm	ARC 1101

RDEV350

Real Estate Development: Introduction to Principles, Process, and Practice

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: RDEV250 or ARCH271. Restriction: Must be enrolled in the RDEV Minor; and permission of ARCH-School of Architecture, Planning, & Preservation. Credit only granted for: RDEV150 or RDEV350. Formerly: RDEV150.

An introduction to the basic principles of real estate development: How real estate and communities get built and how value is created. The emphasis is on entrepreneurship and an experiential learning approach to the entrepreneurial real estate development process, principles, and practice.

0101	Marcus Ervin	Seats (Total: 30)
	M 7:00pm - 9:40pm	ARC 1101
0102	Thomas Kaufman	Seats (Total: 15)
	M 7:00pm - 9:40pm	ARC 1103

RDEV450

Foundations of Real Estate Finance and Investment

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Must have completed RDEV270 or an approved accounting course with a grade of C- or better; and minimum grade of C- in RDEV350. Restriction: Must be enrolled in RDEV Minor; and permission of ARCH-School of Architecture, Planning, & Preservation.

Real Estate Finance and Investment addresses how real estate value is established, the fundamental foundations of the time value of money, as well as more real estate specific applications of return on investment, net operating income, the components of a real estate sources and uses statement, sources of real estate equity and debt financing, commonly used debt ratios and equity returns in real estate, as well as concepts of sensitivity analysis and exit strategies.

0101	Kathryn Corby	Seats (Total: 25)
	W 7:00pm - 9:40pm	ARC 1103

0102	Thomas Dwyer	Seats (Total: 10)
	W 7:00pm - 9:40pm	ASY 3221

RDEV600 Principles and Practice of Real Property Development

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV688T or RDEV600. Formerly: RDEV688T.

An introduction to basic principles of real estate development: How real estate and communities get built and how value is created. The emphasis is on entrepreneurship and an experiential learning approach to the entrepreneurial real estate development process, principles, and practice.

0101	Thomas Kaufman	Seats (Total: 19)
	M 7:00pm - 9:40pm	ARC 1123

RDEV603 Introduction to Real Property Finance

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of the Department. Credit only granted for: RDEV688Z, RDEV689V, or RDEV603. Formerly: RDEV688Z and RDEV689V.

Introduction to Real Property Finance addresses how real estate value is established, the fundamental foundations of the time value of money, as well as more real estate specific applications of return on investment, net operating income, the components of a real estate sources and uses statement, sources of real estate equity and debt financing, commonly used debt ratios and equity returns in real estate, as well as concepts of sensitivity analysis and exit strategies.

0101	Thomas Dwyer	Seats (Total: 20)
	W 7:00pm - 9:40pm	ARC 1105

RDEV605 Tax and Accounting for Real Property Developers

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV688K or RDEV605. Formerly: RDEV688K.

This course is designed to familiarize students with taxation and accounting as it pertains to real estate development.

0101	Leslie Mostow	Seats (Total: 28)
	Tu 7:00pm - 9:40pm	KNI 1105

RDEV620 Market Analysis for Real Property Development**(Perm req)**

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV689M or RDEV620. Formerly: RDEV689M.

Designed to introduce and familiarize students with completing market analysis for real property projects. Includes a broad range of land uses including for-rent and for-sale residential, retail, office, and hospitality. Covers all aspects of completing a market analysis from the site visit to recommendations, and all the steps in-between. Examines how various real estate practitioners, such as developers, builders, investors, landowners, and public officials, utilize market studies.

0101	Abigail Ferretti	Seats (Total: 28)
	M 7:00pm - 9:40pm	ARC 1105

RDEV630 Real Property Finance and Investment**(Perm req)**

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV630, RDEV688B, or URSP664. Formerly: RDEV688B.

This course is designed to introduce students who have experience in real estate finance or have taken an introductory course in real estate finance and investment to move to this intermediate course that addresses foundational concepts of commercial real estate finance and the measures used in analyzing and evaluating real estate projects. Quantitative analysis and financial modeling comprise the main focus.

0101	Stephen Alfandre	Seats (Total: 19)
	Tu 7:00pm - 9:40pm	ARC 1123

RDEV635 Capital Markets and Real Estate Investments for Developers**(Perm req)**Credits: 3 Grading Method: Regular,
Audit

Prerequisite: RDEV630, URSP664, or RDEV688. Restriction: Must be in Real Estate Development (Master's) program; or permission of ARCH-Real Estate Development. Credit only granted for: RDEV635 or RDEV688F. Formerly: RDEV688F.

An advanced course in real estate finance focusing on capital markets and complex financing mechanism in the public and private markets for raising capital for development of public, private and public/private projects.

0101	Kathleen Miles	Seats (Total: 19)
	Th 7:00pm - 9:40pm	ARC 1103

RDEV640 Principles of Urban Design for Real Property Developers

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV688J or RDEV640. Formerly: RDEV688J.

Introduces students to the design issues associated with development of the basic real property asset classes (office, retail, and residential) and the context driven forces that shape these different development types. Also introduces non-design students to the principles of visual literacy and the capacity of different property to support development in the effort to enhance a community.

0101	Robert McClennan	Seats (Total: 25)
	Tu 7:00pm - 9:40pm	ARC 1103

RDEV660 Commercial Leasing for Real Property Developers

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV688L or RDEV660. Formerly: RDEV688L.

Provides students with a hands-on look at commercial and real estate leases, lease provisions, and current market activity, a key factor in determining when and whether to proceed with developing a commercial property.

0101	Martha Naughten	Seats (Total: 25)
	W 7:00pm - 9:40pm	ARC 1101

RDEV670 Negotiating Agreements & Resolving Conflicts when Developing Real Property

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV688E or RDEV670. Formerly: RDEV688E.

Designed to develop students' negotiation and leadership skills for managing differences between individuals and groups while in the process of developing and operating real property. Includes a blend of skill-building exercises and theory discussions about the behavior of individuals to understand negotiation dynamics.

0101	Ronald McDonald	Seats (Total: 16)
	M 7:00pm - 9:40pm	ARC 1127

RDEV688D Selected Topics in Real Estate Development; Geo-Underwriting: Location-Based Project Feasibility Analysis - From Segregation to Gentrification

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Selected topics in real estate development.

This course overviews fundamentals of project level real estate underwriting and its inextricable relationship to the neighborhood context. The construct of "neighborhood" is explored throughout the course as both a social organizing principle and as an economic marketplace. Neighborhoods are considered throughout the historical forces that have shaped them, reaching back to the original formation of ethnic and racial ghettos and moving forward through urban renewal and modern-day gentrification. The changing forms of the real estate projects that have sustained these neighborhoods over time are evaluated . As changes further continued in neighborhoods and altered perceived demands for housing and services, the factors that changed the viability of real estate projects are closely investigated. The course also considers the government and policy landscapes that have helped shape neighborhood form and the real estate types found there. These policies are understood through review of actual case examples.

0101	Instructor: TBA	Seats (Total: 15)
	Th 7:00pm - 9:40pm	Location: TBA

RDEV689Y Current Topics in Real Estate Development; Guided Real Estate Development Project

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Explores a focused aspect in any of the five major phases of real estate development: planning, finance, law, design, construction, or management.

Prerequisite: Permission of the department.

0101	Maria Day-Marshall, Tanya Bansal	Seats (Total: 10)
	Contact instructor or department for details.	

RDEV690 Capstone Project: Real Property Feasibility Study

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: Completion of at least 7 RDEV courses. Restriction: Permission of ARCH-Real Estate Development. Credit only granted for: RDEV688I or RDEV690. Formerly: RDEV688I.

The capstone course is designed to provide students with an opportunity to apply acquired classroom knowledge to real world conditions. Each student in the class will work separately to create a development proposal and feasibility study for an assigned property. For students doing a feasibility study of a development the study will address at least market analysis, entitlement process, construction, and financing for the project.

0101	Maria Day-Marshall, Tanya Bansal Tu 7:00pm - 9:40pm	Seats (Total: 10) ARC 1125
0102	Maria Day-Marshall, Tanya Bansal Tu 7:00pm - 9:40pm	Seats (Total: 10) Location: TBA
0103	Tanya Bansal, Maria Day-Marshall Tu 7:00pm - 9:40pm	Seats (Total: 10) Location: TBA
0104	Tanya Bansal, Maria Day-Marshall Tu 7:00pm - 9:40pm	Seats (Total: 10) Location: TBA
0105	Maria Day-Marshall, Tanya Bansal Tu 7:00pm - 9:40pm	Seats (Total: 10) Location: TBA

RELS Religious Studies Fall 2019

RELS120 Islamic Civilization

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH, D General Education: DSHU

Cross-listed with HIST120. Credit only granted for: HIST120 or RELS120.

Introduction to society and culture in the Middle East since the advent of Islam: as a personal and communal faith; as artistic and literary highlights of intellectual and cultural life; and as the interplay between politics and religion under the major Islamic regimes.

0101	Antoine Borrut MW 2:00pm - 2:50pm F 10:00am - 10:50am	Seats (Total: 24) SYM 0200 TYD 2108 Discussion
0102	Antoine Borrut MW 2:00pm - 2:50pm F 11:00am - 11:50am	Seats (Total: 24) SYM 0200 TYD 2108 Discussion

0103	Antoine Borrut	Seats (Total: 24)	
	MW 2:00pm - 2:50pm	SYM 0200	
	F 12:00pm - 12:50pm	TYD 2108	Discussion

RELS170

Greek and Roman Mythology

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL General Education: DSHU

Cross-listed with CLAS170. Credit only granted for: CLAS170 or RELS170. Additional information: This course cannot be taken for language credit.

An introduction to the mythology of ancient Greece and Rome. This course is particularly recommended for students planning to major in foreign languages, English, history, the fine arts, or journalism. Taught in English.

0101	Gregory Staley	Seats (Total: 21)	
	MW 11:00am - 11:50am	MMH 1400	
	F 10:00am - 10:50am	PLS 1111	Discussion
0102	Gregory Staley	Seats (Total: 21)	
	MW 11:00am - 11:50am	MMH 1400	
	Th 9:30am - 10:20am	JMP 2202	Discussion
0103	Gregory Staley	Seats (Total: 21)	
	MW 11:00am - 11:50am	MMH 1400	
	Th 11:00am - 11:50am	CHM 0119	Discussion
0104	Gregory Staley	Seats (Total: 21)	
	MW 11:00am - 11:50am	MMH 1400	
	Th 12:30pm - 1:20pm	CHM 1228	Discussion
0105	Gregory Staley	Seats (Total: 21)	
	MW 11:00am - 11:50am	MMH 1400	
	Th 12:30pm - 1:20pm	CHM 0124	Discussion
0106	Gregory Staley	Seats (Total: 21)	
	MW 11:00am - 11:50am	MMH 1400	
	F 11:00am - 11:50am	PLS 1164	Discussion
0107	Gregory Staley	Seats (Total: 21)	
	MW 11:00am - 11:50am	MMH 1400	
	F 1:00pm - 1:50pm	PLS 1113	Discussion

0108	Gregory Staley	Seats (Total: 21)	
	MW 11:00am - 11:50am	MMH 1400	
	Th 11:00am - 11:50am	CHM 0127	Discussion
0109	Gregory Staley	Seats (Total: 22)	
	MW 11:00am - 11:50am	MMH 1400	
	Th 9:30am - 10:20am	EGR 1102	Discussion

RELS219D Special Topics in Religious Studies; Why the Jews? Historical and Cultural Investigations

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics in Religious Studies

Examines the history and culture of the Jews from the thirteenth century BCE/BC to the present through an examination of significant themes or problems (such as "religion" or "diaspora") that shape our understanding of the Jewish people. A primary focus in the course will be on texts, artifacts, and other cultural products by Jews and others that illustrate the history of the Jews help understand their cultural heritage.

0101	Bernard Cooperman	Seats (Total: 24)	
	TuTh 2:00pm - 2:50pm	SQH 1120	
	W 11:00am - 11:50am	TLF 1103	Discussion
0102	Bernard Cooperman	Seats (Total: 24)	
	TuTh 2:00pm - 2:50pm	SQH 1120	
	W 12:00pm - 12:50pm	TLF 1103	Discussion
0103	Bernard Cooperman	Seats (Total: 20)	
	TuTh 2:00pm - 2:50pm	SQH 1120	
	W 2:00pm - 2:50pm	WDS 1131	Discussion

RELS219Z Special Topics in Religious Studies; The Devil in the Western Imagination

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics in Religious Studies

Cross-listed with HIST219Z. Credit granted for HIST219Z or RELS219Z.

0101	Andrew Kellett	Seats (Total: 40)	
	Class time/details on ELMs	ONLINE	

RELS269 Special Topics in Study Abroad II

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

RELS269G Special Topics in Study Abroad II; From Asoka to Gandhi: Buddhism and Hinduism in Contemporary Society

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

RELS289D "God Wills It!" The Crusades in Medieval and Modern Perspectives

Credits: 3 Grading Method: Regular, CORE: SH General Education: DSHS,
Pass-Fail, Audit SCIS

Cross-listed with: HIST133. Credit only granted for: HIST133 or RELS289D.

An examination of the identities and convictions both of the Western Europeans who participated in the Crusades and of the Easterners (Muslim, Christian, and Jewish) whom they encountered in the Holy Land. Focuses on the era of the first four great Crusades, from about 1095 to 1215. Consideration of the cultural impact of these movements on both Western Europe and the Middle East.

Jointly offered with HIST133. Credit only granted for: HIST133, HIST289 D, or RELS289D.

0101	Janna Bianchini	Seats (Total: 24)	
	MW 11:00am - 11:50am	SYM 0200	
	W 12:00pm - 12:50pm	TLF 1101	Discussion
0102	Janna Bianchini	Seats (Total: 24)	
	MW 11:00am - 11:50am	SYM 0200	
	F 10:00am - 10:50am	TLF 1101	Discussion
0103	Janna Bianchini	Seats (Total: 24)	
	MW 11:00am - 11:50am	SYM 0200	
	F 11:00am - 11:50am	TLF 1101	Discussion

RELS289J New Explorations in Religious Studies; Jerusalem in Antiquities

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHU,
DVUP, SCIS

Investigation of critical and innovative responses in Religious Studies. Although the topic will vary, the course will encourage intellectual exploration by students of fundamental problems and critical methods.

Cross-listed with JWST289J. Credit will be granted for JWST289J or RELS289J.

0101	Gregory Stoehr	Seats (Total: 20)	
	MW 11:00am - 11:50am	ASY 2309	
	W 1:00pm - 1:50pm	ASY 3217	Discussion
0102	Gregory Stoehr	Seats (Total: 20)	
	MW 11:00am - 11:50am	ASY 2309	
	F 11:00am - 11:50am	WDS 1130	Discussion
0103	Gregory Stoehr	Seats (Total: 20)	
	MW 11:00am - 11:50am	ASY 2309	
	F 12:00pm - 12:50pm	WDS 0104	Discussion
0104	Gregory Stoehr	Seats (Total: 20)	
	MW 11:00am - 11:50am	ASY 2309	
	W 2:00pm - 2:50pm	ASY 3207	Discussion

RELS289M

Jesus, Mani, and Muhammad: The Dynamics of New Religious Movements

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: HO, D

General Education: DSHU,
DVUP, SCIS

Cross-listed with: HIST289T. Credit only granted for: RELS289M or HIST289T.

Cross-listed with HIST289T. Credit Granted for RELS289M or HIST289T.

0101	Elizabeth Conner	Seats (Total: 24)	
	MW 1:00pm - 1:50pm	TYD 2106	
	W 2:00pm - 2:50pm	SQH 1103	Discussion
0102	Elizabeth Conner	Seats (Total: 24)	
	MW 1:00pm - 1:50pm	TYD 2106	
	F 11:00am - 11:50am	SQH 1101	Discussion

0103	Elizabeth Conner	Seats (Total: 24)	
	MW 1:00pm - 1:50pm	TYD 2106	
	F 1:00pm - 1:50pm	SQH 1101	Discussion

RELS341 Europe in the High Middle Ages: 1000-1500

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with HIST331. Credit only granted for: HIST331 or RELS341.

Medieval civilization in the 11th through 15th centuries. Emphasis on cultural and political developments of the high Middle Ages with study of the principal sources of medieval thought and learning, art and architecture, and political theory prior to the Renaissance.

0101	Janna Bianchini	Seats (Total: 40)	
	MW 2:00pm - 3:15pm	KEY 0126	

RELS342 Renaissance Europe

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: HIST112 or HIST111; or permission of instructor. Also offered as: HIST332. Credit only granted for: HIST332 or RELS342.

Intellectual developments in Italy and Northern Europe from 1300 to 1550 and their influence on the arts and religion; social and economic trends, including the rise of the commercial economy in cities; the family and the role of women in society; expansion of Europe overseas and the beginnings of colonization; emergence of the state and consequent changes in political theory.

0101	Stefano Villani	Seats (Total: 30)	
	TuTh 3:30pm - 4:45pm	KEY 0116	

RELS369C Special Topics in Study Abroad III; Between Tolerance and Conflict: Jewish, Christians and Muslims in the Iberian Peninsula

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

RELS369R Special Topics in Study Abroad III; Christianity and the Roman Empire (100-425CE)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

RELS419J Advanced Topics in Religious Studies; The Aztecs: Human Sacrifice and Conquest

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The contemporary study of religion in which topics may address specific religious traditions, regional or historical developments, or methodological and theoretical issues.

Cross-listed with HIST429N, PHIL428N, and LASC448J. Credit only granted for HIST429N, PHIL428N, LASC448J, or RELS419J.

0101	James Maffie	Seats (Total: 40)
	TuTh 2:00pm - 3:15pm	KEY 0116

RELS419X Advanced Topics in Religious Studies; History of Iran in the Islamic Period (7th Century to the Present)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

The contemporary study of religion in which topics may address specific religious traditions, regional or historical developments, or methodological and theoretical issues.

Cross-listed with HIST429L and PERS498L. Credit only granted for HIST429L, PERS498L, or RELS419X.

0101	Ahmet Karamustafa	Seats (Total: 10)
	Tu 3:30pm - 6:00pm	HJP 3120

RELS430 Dead Sea Scrolls

Credits: 3 Grading Method: Regular, General Education: DSHU,
Pass-Fail, Audit DSSP

Prerequisite: Must have completed one JWST course or one RELS course; or permission of ARHU-Meyerhoff Program & Center for Jewish Studies. Cross-listed with JWST430. Credit only granted for: JWST430 or RELS430.

A study of the Dead Sea Scrolls in their ancient and modern settings, and in terms of contemporary scholarly interpretations of their meaning. Interpretations of the historical significance of these documents, their connections to ancient Jewish sectarian movements, and their implications for our understanding of Judaism, Christianity, and the history of the Bible.

Prerequisite: Must have completed one JWST course or one RELS course; or permission of ARHU-Meyerhoff Program & Center for Jewish Studies.

0101	Maxine Grossman	Seats (Total: 40)
	Th 4:00pm - 6:30pm	SQH 1103

RELS499 Independent Study in Religious Studies

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

An advanced independent research project for qualified students, supervised by a faculty member, on a topic not ordinarily covered in available courses.

Contact department for information to register for this course.

RUSS Russian Fall 2019

RUSS101 Intensive Elementary Russian I

Credits: 6 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a native/fluent speaker of Russian. Credit only granted for: RUSS101 or (RUSS111 and RUSS112).

This intensive first-year course is intended to develop the four skills: reading, writing, listening and speaking with an emphasis on communicative competence.

This course has been put on a timed release system. Seats will be opened gradually by the registrar's office, to a total of 15 seats per section. If the course is full, please put yourself on the waitlist and contact Dr. Cynthia Martin (cmartin@umd.edu) for permission to enroll.

0101	Inna Hardman	Seats (Total: 15)
	MWF 10:00am - 10:50am	JMZ 0120
	TuTh 9:30am - 10:45am	JMZ 0120
0201	Inna Hardman	Seats (Total: 15)
	MWF 11:00am - 11:50am	JMZ 0120
	TuTh 11:00am - 12:15pm	JMZ 0120

RUSS201 Intermediate Russian I

Credits: 5 Grading Method: Regular,
Pass-Fail, Audit CORE: HO

Prerequisite: RUSS102 or RUSS114; or must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a native/fluent speaker of Russian.

Continued activation and expansion of skills and knowledge acquired in an elementary Russian course with the goal of communicative competence.

If the course is full, please put yourself on the waitlist and contact Dr. Cynthia Martin (cmartin@umd.edu) for permission to enroll.

0101	Zhanna Gerus-Vernola	Seats (Total: 15)
	MWF 10:00am - 10:50am	JMZ 2125
	TuTh 10:00am - 10:50am	JMZ 2125

RUSS289I The Power of the Word: Freedom of Speech in the U.S. and Russia

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO General Education: DSHU, SCIS

Why is free speech so essential in a democracy and such a threat to totalitarianism? Through a comparative approach to the US and Russian experiences, we will explore the role of language and its power to ask questions and challenge assumptions. The abiding human propensity to ask questions forms the foundation for all critical thinking, a skill students will be encouraged to develop throughout the course.

0101	Cynthia Martin	Seats (Total: 60)
	MW 3:30pm - 4:45pm	TWS 1310

RUSS301 Advanced Russian I

Credits: 3 Grading Method: Regular, Audit

Prerequisite: RUSS202; or students who have taken courses with comparable content may contact the department. Restriction: Must not be a native/fluent speaker of Russian.

Advanced training in written Russian communicative structures.

0101	Anastasiia Selemeneva	Seats (Total: 15)
	TuTh 9:30am - 10:45am	JMZ 3203

RUSS303 Russian Conversation: Functional Skills

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: RUSS202; or students who have taken courses with comparable content may contact the department.

Intended for students who do not anticipate having the opportunity to study in Russia. Skills for daily life (both function and etiquette) and argumentation (rhetoric).

0101	Zhanna Gerus-Vernola	Seats (Total: 15)
	MWF 9:00am - 9:50am	JMZ 3118

RUSS334 **Soviet Film: Propaganda, Myth, Modernism**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Cross-listed with FILM334. Credit only granted for: RUSS334, FILM334, or RUSS298K. Formerly: RUSS298K.

A Survey of Soviet film from the 1920s to 1991, focusing on important directors, genres, themes, and styles. Taught in English.

0101	Elizabeth Papazian	Seats (Total: 30)
	MW 12:00pm - 1:50pm	ESJ B0322

RUSS386 **Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Restriction: Junior standing or higher; and permission of ARHU-School of Languages, Literatures, and Cultures department.

Contact the department to obtain section numbers.

Contact department for information to register for this course.

RUSS401 **Advanced Russian Composition**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: RUSS302; or students who have taken courses with comparable content may contact the department. Restriction: Not open to native speakers of Russian.

Approaches to argumentation, organization of information, contextualized grammar, appropriateness of lexical choice, genre, and register.

0101	Cynthia Martin	Seats (Total: 15)
	MWF 11:00am - 11:50am	JMZ 1124

RUSS439C**Selected Topics in Russian Literature; Russian Fantasy and Science Fiction**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit*Presentation of a topic in Russian literature.*

Prerequisite: RUSS202 An examination of the fantastic in Russian literature and film. Readings include short stories and selected novels that present imagined realities in dreams, utopian visions, and scientific projects aimed at improving society and human race. Taught in Russian.

0101	Anastasiia Selemeneva	Seats (Total: 15)
	TuTh 11:00am - 12:15pm	JMZ 2125

RUSS499**Independent Study in Russian**

(Perm req)

Credits: 1-3

Grading Method: Regular

*Independent study under faculty supervision.***Contact department for information to register for this course.**

RUSS798**Independent Study**

Credits: 1-3

Grading Method: Regular,
Audit**Contact department for information to register for this course.**

RUSS799**Thesis Research**

Credits: 1-6

Grading Method: Regular, Sat-
Fail**Contact department for information to register for this course.**

SLAA**Second Language Acquisition and Application****Fall 2019**

SLAA610**Research and Theories in Second Language Acquisition**

Credits: 3

Grading Method: Regular,
Audit*Introduction to current theories and research findings Second Language Acquisition (SLA).*

0101	Michael Long	Seats (Total: 10)
	M 2:00pm - 4:30pm	JMZ 3203

SLAA611 Fundamentals of Foreign Language Acquisition and Instruction

Credits: 3 Grading Method: Regular,
 Audit

Introduction to theoretical and practical issues relevant to foreign language learning, language acquisition, and curriculum construction.

0101	Kira Gor	Seats (Total: 10)
	W 2:00pm - 4:30pm	JMZ 1123

SLAA630 Second Language Testing

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: SLAA610; or permission of ARHU-School of Languages, Literatures, and Cultures department.

An introduction to basic concepts in the assessment of second language knowledge. Issues of reliability, dependability, construct validity, utility, and washback on instruction are examined.

0101	Steven Ross	Seats (Total: 15)
	Tu 2:00pm - 4:30pm	JMZ 1117

SLAA649R Special Topics in Second Language Acquisition; Research Critique

Credits: 3 Grading Method: Regular,
 Audit

Current topics in research in second language acquisition.

0101	Nan Jiang	Seats (Total: 10)
	Th 5:00pm - 7:30pm	JMZ 2122

SLAA719 Second Language Acquisition and Application Internship

Credits: 3 Grading Method: Regular,
 Audit

Internship at a site to be determined. Topics may include heritage language learning, immersion education, testing and assessment, translation and interpretation, and national language planning and policy.

Contact department for information to register for this course.

Special Topics in Second Language Learning; Bilingual Language Processing

Current topics in research on Second Language Learning.

0101	Nan Jiang	Seats (Total: 10)
	Th 2:00pm - 4:30pm	JMZ 1120

Instructed Second Language Acquisition

Prerequisite: SLAA610.

Survey of studies on effectiveness of SLA instruction within various domains of language, with focus on research design.

0101	Michael Long	Seats (Total: 12)
	M 5:00pm - 7:30pm	JMZ 3203

Directed Research in Second Language Acquisition and Application

Directed independent research in Second Language Acquisition or Application. In this capstone project, students engage in independent research under faculty direction.

Contact department for information to register for this course.

Master's Independent Study

Contact department for information to register for this course.

Master's Thesis Research

Contact department for information to register for this course.

Doctoral Independent Study

Credits: 1-3 Grading Method: Regular,
Audit

Individual instruction course.

Contact department for information to register for this course.

SLAA898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

SLAA899 Doctoral Dissertation Research

(Perm req) Credits: 6 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

**SLLC School of Languages, Literatures
and Cultures**

Fall 2019

SLLC108Q Beg Less Commonly Taught Language I; Elementary Quechua I

Credits: 4 Grading Method: Regular

Study of any of the less commonly taught languages at the elementary level. Speaking, listening, reading, and writing a less commonly taught language. Development of an emphasis on oral proficiency skills.

Elementary Quechua I is a Big Ten Academic Alliance CourseShare course. The instructor is at the University of Michigan, but you enroll and receive credit for it at Maryland. Before enrolling in the course, to determine appropriate placement heritage speakers and those with prior knowledge of Quechua should contact the course instructor at UMich, Ms. Adela Carlos Rios: acarlosr@umich.edu, 734-647-4509. Introduces students with little or no Quechua proficiency to conversational and cultural skills needed to use the language in real life situations. Covers both written and spoken Quechua; introduces basic structures of Quechua while focusing on the development of speaking and reading skills; emphasis is on developing conversational ability. Those who successfully finish this course will gain sustained control of basic conversation.

0101	Instructor: TBA	Seats (Total: 5)
	Meets September 3, 2019 - December 11, 2019	
	TuTh 9:00am - 11:00am	JMZ 3202

SLLC108R Beg Less Commonly Taught Language I; ELEMENTARY URDU I

Credits: 4 Grading Method: Regular

Study of any of the less commonly taught languages at the elementary level. Speaking, listening, reading, and writing a less commonly taught language. Development of an emphasis on oral proficiency skills.

Elementary Urdu I is a Big Ten Academic Alliance Course-Share course. The instructor is at the University of Minnesota, but you enroll and receive credit for it at Maryland. In order to connect remotely students should have a private space, a computer with webcam and microphone, a stable ethernet connection, and headphones, in addition to any technical requirements from the instructor. Heritage speakers and those with prior knowledge of Urdu should contact the instructor of UMN before enrolling in the course to determine appropriate placement, Meraj Ahmed: ahmedm@UMN.edu or 612-624-4876.

0101	Instructor: TBA	Seats (Total: 10)
	Meets September 3, 2019 - December 11, 2019	
	MTuWThF 1:20pm - 2:10pm	ONLINE

SLLC108V Beg Less Commonly Taught Language I; Vietnamese I

Credits: 4 Grading Method: Regular

Study of any of the less commonly taught languages at the elementary level. Speaking, listening, reading, and writing a less commonly taught language. Development of an emphasis on oral proficiency skills.

First year Vietnamese is a Big Ten Academic Alliance Course-Share course. The instructor is at Michigan State University, but you enroll and receive credit for it at Maryland. You will also need to be entered into the Michigan State University course management system Desire to Learn (D2L). For more information about this course, including textbook information and instructions on enrolling in D2L, please see <https://goo.gl/yoEbEm>. Heritage speakers and those with prior knowledge of Vietnamese need to contact the Course Coordinator at MSU before enrolling in the course to determine appropriate placement, Ms. Steider: steider@msu.edu, 517-355-5105.

0101	Instructor: TBA	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

SLLC169B Special Topics in Study Abroad I; Elementary Basque I

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC169C Special Topics in Study Abroad I; Elementary Basque II

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC169D Special Topics in Study Abroad I; Great Czech Writers

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC169L Special Topics in Study Abroad I; Basque Language and Culture

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC208V Intermediate Less Commonly Taught Language I; Vietnamese I

Credits: 4 Grading Method: Regular

Intermediate-level work on speaking, reading, and writing a less commonly taught language. Continued development of oral proficiency skills.

Second year Vietnamese is a Big Ten Academic Alliance Course-Share course. The instructor is at Michigan State University, but you enroll and receive credit for it at Maryland. You will need to be entered into the Michigan State University course management system Desire to Learn (D2L). For more information about this course, including textbook information and instructions on enrolling in D2L, please see <https://goo.gl/yoEbEm>. The course pre-requisite is SLLC109V. Heritage speakers and those with prior knowledge of Vietnamese need to contact the Course Coordinator at MSU before enrolling in the course to determine appropriate placement, Ms. Steider: steider@msu.edu, 517-355-5105.

0101	Instructor: TBA	Seats (Total: 10)
	Class time/details on ELMs	ONLINE

SLLC269B Special Topics in Study Abroad II; Scandinavian Moods in Cinema

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC269D Special Topics in Study Abroad II; Catalan Language and Culture

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC269X Special Topics in Study Abroad II; Intermediate Basque I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC269Y Special Topics in Study Abroad II; Intermediate Basque II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC286 Living the Good Life: Chinese Philosophy in the Modern World

Credits: 3 Grading Method: Regular, General Education: DSHU,
Pass-Fail, Audit SCIS

Additional information: Taught in English.

Confucius, Mencius, Zhuangzi and other Chinese thinkers who lived more than 2,000 years ago would argue that the contemporary Western emphasis on self-discovery (Find yourself) and self-acceptance has led you astray. See what they have to say and discuss what relevance it has for the modern world as we study how early Chinese thinkers wrestled with questions of existence, morality, and governance. No previous knowledge of Chinese philosophy and history will be assumed and no prerequisites are required. We will discuss ideas that are both historical and relevant to students' lives. What is "the Way"? How do we cultivate spontaneity? Is there a stable self? How can we be more alive? These are questions important for ancient kings but also for UMD students choosing a major, or wondering how ARHU can benefit them.

0101	Andrew Schonebaum	Seats (Total: 60)
	TuTh 2:00pm - 3:15pm	JMZ 0220

SLLC299P Special Topics in World Cultures; Behavior of the Rich and Powerful, Past and Present

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHU

Topic to be announced when course is offered.

Through the study of XV and XVI century courtesy literature, in this course we will explore the various forms of behavior of the rich and powerful of the Italian Renaissance, an era that is much closer to our contemporary world than we might initially think, especially in regard to the way political and influential figures act in social situations and the image of themselves they present to others. What can we learn from observing and comparing the behavior of the rich and powerful of the past and present? In the public arena of these two worlds, does appearance matter more than truth?

FC01	Joseph Falvo	Seats (Total: 18)
	MW 6:00pm - 7:15pm	JMZ 2117
<i>Restricted to students in Freshmen Connection.</i>		

SLLC299R Special Topics in World Cultures; Elementary Italian I

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Topic to be announced when course is offered.

Contact department for information to register for this course.

SLLC299Z Special Topics in World Cultures; Spanish Civilization and Culture

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topic to be announced when course is offered.

Contact department for information to register for this course.

SLLC309 Language Partner Program

(Perm req)

Credits: 1 Grading Method: Regular

For intermediate- to advanced-level language study. Conversations entirely in target language with native speaker.

Students must be available to meet on Monday, September 23, 2019 and Monday, December 2, 2019.

0101	Mehl Penrose Meets September 23, 2019 - December 2, 2019 M 4:00pm - 5:50pm Contact instructor or department for details. <i>Arabic.</i>	Seats (Total: 10) Location: TBA
0102	Mehl Penrose Meets September 23, 2019 - December 2, 2019 M 4:00pm - 5:50pm Contact instructor or department for details. <i>Chinese.</i>	Seats (Total: 10) Location: TBA
0103	Mehl Penrose Meets September 23, 2019 - December 2, 2019 M 4:00pm - 5:50pm Contact instructor or department for details. <i>French.</i>	Seats (Total: 10) Location: TBA
0104	Mehl Penrose Meets September 23, 2019 - December 2, 2019 M 4:00pm - 5:50pm Contact instructor or department for details. <i>German.</i>	Seats (Total: 10) Location: TBA
0105	Mehl Penrose Meets September 23, 2019 - December 2, 2019 M 4:00pm - 5:50pm Contact instructor or department for details. <i>Italian.</i>	Seats (Total: 10) Location: TBA
0106	Mehl Penrose Meets September 23, 2019 - December 2, 2019 M 4:00pm - 5:50pm Contact instructor or department for details. <i>Japanese.</i>	Seats (Total: 10) Location: TBA

0108	Mehl Penrose	Seats (Total: 10)
	Meets September 23, 2019 - December 2, 2019	
	M 4:00pm - 5:50pm	Location: TBA
	Contact instructor or department for details.	
	<i>Persian.</i>	
0109	Mehl Penrose	Seats (Total: 10)
	Meets September 23, 2019 - December 2, 2019	
	M 4:00pm - 5:50pm	Location: TBA
	Contact instructor or department for details.	
	<i>Russian.</i>	
0110	Mehl Penrose	Seats (Total: 10)
	Meets September 23, 2019 - December 2, 2019	
	M 4:00pm - 5:50pm	Location: TBA
	Contact instructor or department for details.	
	<i>Spanish.</i>	

SLLC369A Special Topics in Study Abroad III; Alternative Culture, Literature, Music and Lifestyles

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC369C Special Topics in Study Abroad III; Czech Film

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC369D Special Topics in Study Abroad III; Art and Dictatorship

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC369X Special Topics in Study Abroad III; Advanced Basque I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC369Y Special Topics in Study Abroad III; Advanced Basque II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SLLC386 Experiential Learning

Credits: 3 Grading Method: Regular,
Pass-Fail

Prerequisite: Learning Proposal approved by the Office of Experiential Learning Programs, faculty sponsor and the student's internship sponsor. Restriction: Junior standing or higher.

Contact department for information to register for this course.

SLLC789 Master's Independent Study

Credits: 1-3 Grading Method: Regular

Contact department for information to register for this course.

SLLC889 Doctoral Independent Study

(Perm req)

Credits: 1-3 Grading Method: Regular

Contact department for information to register for this course.

SOCY Sociology

Fall 2019

SOCY100 Introduction to Sociology

Credits: 3 Grading Method: Regular, CORE: SB General Education: DSHS
Pass-Fail, Audit

The fundamental concepts and principles of sociology. Includes consideration of culture, patterns of social interaction, norms, values, social institutions, stratification, and social change.

0101	Joey Brown	Seats (Total: 90)
	TuTh 9:30am - 10:45am	ASY 1213

0201	Joey Brown TuTh 2:00pm - 3:15pm	Seats (Total: 90) ASY 1213
0301	Amelia Branigan TuTh 12:30pm - 1:45pm	Seats (Total: 100) TYD 0117
0401	Robert Pernick MWF 12:00pm - 12:50pm	Seats (Total: 90) TWS 0310
FC01	Mary DeStefano MW 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 36) ASY 2309
FC02	Daniel Swann TuTh 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 34) ASY 1213

SOCY100H
Introduction to Sociology

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: SB General Education: DSHS

The fundamental concepts and principles of sociology. Includes consideration of culture, patterns of social interaction, norms, values, social institutions, stratification, and social change.

Open to Honor students only.

0101	Brian Connor MWF 10:00am - 10:50am	Seats (Total: 25) ASY 3221
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SOCY105
Introduction to Contemporary Social Problems

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: SB General Education: DSHS

An examination of contemporary social problems through sociological perspectives; ways in which social problems are part of the organization of society; a detailed study of selected social problems including social conflict and social inequality.

0101	Nicole DeLoatch TuTh 12:30pm - 1:45pm	Seats (Total: 60) ASY 1213
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0201	Joey Brown TuTh 3:30pm - 4:45pm	Seats (Total: 60) ASY 1213
0301	Mollie Greenberg MWF 1:00pm - 1:50pm	Seats (Total: 60) ASY 1213
0401	Zsuzsa Daczo MWF 12:00pm - 12:50pm	Seats (Total: 60) ASY 2309
FC01	Carrie Clarady MW 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 34) ASY 1213

SOCY120

Veterans in American Society: What does America Owe Its Veterans?

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSHS, SCIS

An examination of current and past policies toward compensation for military veterans, data and evidence on current and past adjustments to life after military service, historical variations in the mechanisms for staffing the military, and trends in the contours of the lives of those who do not serve.

0101	Meredith Kleykamp TuTh 2:00pm - 2:50pm W 11:00am - 11:50am	Seats (Total: 29) SHM 2102 TWS 1106	Discussion
0301	Meredith Kleykamp TuTh 2:00pm - 2:50pm W 2:00pm - 2:50pm	Seats (Total: 28) SHM 2102 ASY 3215	Discussion

SOCY200

Human Societies

Credits: 4 Grading Method: Regular, Pass-Fail, Audit CORE: SB General Education: DSHS, SCIS

A comparative, historical, interdisciplinary study of human societies that focuses on the main components of human societies, how they are organized, how they change, and how they come to shape our collective social existence.

0101	John Pease MW 2:00pm - 3:15pm F 11:00am - 11:50am	Seats (Total: 21) ASY 2203 ASY 3211	Discussion
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0102	John Pease	Seats (Total: 21)	
	MW 2:00pm - 3:15pm	ASY 2203	
	F 1:00pm - 1:50pm	ASY 3217	Discussion
0103	John Pease	Seats (Total: 21)	
	MW 2:00pm - 3:15pm	ASY 2203	
	F 10:00am - 10:50am	JMZ 1122	Discussion
0107	John Pease	Seats (Total: 15)	
	MW 2:00pm - 3:15pm	ASY 2203	
	F 12:00pm - 12:50pm	ARC 1125	Discussion

SOCY201

Introductory Statistics for Sociology

(Perm req)

Credits: 4

Grading Method: Regular,
Pass-Fail, Audit

General Education: FSAR

Prerequisite: SOCY100; and (MATH107 or MATH111). Or students who have taken courses with comparable content may contact the department. Restriction: Must not have completed STAT400, BMGT231, or ENEE324. Credit only granted for: BIOM301, BMGT230, CCJS200, ECON230, ECON321, EDMS451, GEOG306, GEOL351, GVPT422, INST314, JOUR405, PSYC200 or SOCY201. (These courses do not necessarily meet the same major requirements-check with your advisor to see which of these courses will count for your major).

Elementary descriptive and inferential statistics. Construction and percentaging of bivariate contingency tables; frequency distributions and graphic presentations; measures of central tendency and dispersion; parametric and nonparametric measures of association and correlation; regression; probability; hypothesis testing; the normal, binomial and chi-square distributions; point and interval estimates.

0101	Alan Neustadtl	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm	ASY 2309	
	W 12:00pm - 1:50pm	LEF 0229	Lab
0102	Alan Neustadtl	Seats (Total: 20)	
	TuTh 11:00am - 12:15pm	ASY 2309	
	W 10:00am - 11:50am	LEF 0231	Lab

SOCY202

Introduction to Research Methods in Sociology

Credits: 4

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP

Prerequisite: SOCY201; or permission of BSOS-Sociology department.

The underlying logic, major strategies, specific techniques and skills of sociological research. Research design, measurement, data collection, sampling, field research experiments, surveys, index and scale construction, data analysis, interpretation and report writing.

0201	Wayne Santoro	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ASY 1213
	F 10:00am - 11:50am	LEF 0229 Lab
0202	Wayne Santoro	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ASY 1213
	F 10:00am - 11:50am	LEF 0231 Lab
0203	Wayne Santoro	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ASY 1213
	F 12:00pm - 1:50pm	LEF 0229 Lab
0204	Wayne Santoro	Seats (Total: 20)
	TuTh 11:00am - 12:15pm	ASY 1213
	F 12:00pm - 1:50pm	LEF 0231 Lab

SOCY203

Sociological Theory

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: SOCY100.

Development of the science of sociology; historical backgrounds; recent theories of society. Required of all sociology majors.

0101	Brian Connor	Seats (Total: 78)
	MWF 11:00am - 11:50am	ASY 1213

SOCY224

Why are We Still Talking About Race?

Credits: 3 Grading Method: Regular General Education: DSHS,
SCIS

Exploration of the major debates and assumptions that construct individual perceptions of what race is and how race matters. Sociological and sub-cultural theories will give students a historical and present day frame with which to view race and ethnic relations in the twenty-first century.

0101	Nicole Cousin-Gossett	Seats (Total: 78)
	TuTh 9:30am - 10:50am	TWS 1310

SOCY225 Women's Jobs, Men's Jobs: How and Why Do They Differ?

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit SCIS

An exploration of critical issues pertaining gender differences in the workplace. Overview of theories explaining why some people do better than the others in the world of work, and discussions of more specific questions relating to women's and men's job opportunities and experiences.

0101	Wei-hsin Yu	Seats (Total: 22)	
	MW 2:00pm - 2:50pm	LEF 2166	
	F 10:00am - 10:50am	ASY 3215	Discussion
0103	Wei-hsin Yu	Seats (Total: 22)	
	MW 2:00pm - 2:50pm	LEF 2166	
	F 1:00pm - 1:50pm	SQH 2120	Discussion

SOCY227 Introduction to the Study of Deviance

Credits: 3 Grading Method: Regular, CORE: SB General Education: DSHS
Pass-Fail, Audit

Credit only granted for: SOCY227 or SOCY327. Formerly: SOCY327.

An introduction to the sociological study of deviant behavior, covering such topics as mental illness, sexual deviance, and the use of drugs.

0101	Zsuzsa Daczo	Seats (Total: 50)	
	TuTh 9:30am - 10:45am	ARC 1105	
0201	Mollie Greenberg	Seats (Total: 50)	
	MWF 12:00pm - 12:50pm	ASY 1213	

SOCY230 Sociological Social Psychology

Credits: 3 Grading Method: Regular, General Education: DSHS
Pass-Fail, Audit

Theoretical perspectives and their applications. Socialization through the life course, the self-concept, attitudes, emotion, attribution, interpersonal relations, group processes, deviance, and social change.

0101	Amanda Dewey	Seats (Total: 192)	
	TuTh 12:30pm - 1:45pm	ASY 2203	

SOCY236**Gender and Health**

Credits: 3

Grading Method: Regular,
Pass-Fail, AuditGeneral Education: DSHS,
DSSP

The relationship between gender and health is the central focus of this course, and how this relationship is conditioned by race-ethnicity, sexuality, and social class. We consider how sociopolitical and environmental factors influence gendered associations with physical and mental health. In addition, this is a course on how to do the disciplinary work of sociology. Social policies surrounding health have been crucial to creating our current understandings of our system, and this course will give insight into how policies are crafted through a peer reviewed process that relies on critical feedback from sociologists engaged in the same project, in this case, the other students in this course.

0101	Liana Sayer	Seats (Total: 78)
	MW 10:00am - 10:50am	TWS 1310
	Class time/details on ELMs	ONLINE

SOCY242**Sociology of Homelessness**

Credits: 3

Grading Method: Regular

General Education: DSSP

Examines the causes of and solutions for homelessness in society. How social scientists analyze social issues using ethnographic observation, surveys, official statistics, and other research methods. Discusses how policies have responded to the problem of homelessness, and how to evaluate their effectiveness.

0101	Reeve Vanneman	Seats (Total: 36)
	TuTh 2:00pm - 3:15pm	ASY 3203

SOCY325**The Sociology of Gender**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit, D

Prerequisite: 3 credits in SOCY courses. Cross-listed with WMST325. Credit only granted for: SOCY325 or WMST325.

Institutional bases of gender roles and gender inequality, cultural perspectives on gender, gender socialization, feminism, and gender-role change. Emphasis on contemporary American society.

0101	Zsuzsa Daczo	Seats (Total: 60)
	MWF 2:00pm - 2:50pm	ASY 2309

SOCY335**Sociology of Health and Illness**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP

An exploration of the social model to studying health and illness: how meanings and experiences of health and illness are socially produced. How experiences are shaped by the interaction of external social environments (culture, community) and the internal environment (human body), and by socio-demographic variables (race, class, gender, etc.). Disparities in health and healthcare delivery, medicalization of society, determinants of health, social construction of illness, and the social organization of health care.

0101	Joan Kahn	Seats (Total: 80)
	TuTh 12:30pm - 1:45pm	ASY 2309

SOCY380 Honors Independent Reading in Sociology

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of BSOS-Sociology department. Formerly: SOCY378.

This course permits sociology honor students to undertake a program or reading on a particular problem in sociology or a subfield therein. The reading will be done under the supervision of a member of the sociology faculty. Required of sociology honor students.

0101	Nicole Cousin-Gossett	Seats (Total: 5)
	Contact instructor or department for details.	

SOCY381 Honors Independent Research in Sociology

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: SOCY380. Formerly: SOCY388.

This course permits sociology students to define a particular problem in sociology or a subfield therein and to develop a research plan for use as a thesis topic. The work will be done under the supervision of a member of the sociology faculty.

Contact department for information to register for this course.

SOCY383 Honors Thesis Research

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: SOCY381. Formerly: SOCY389.

Student research under the direction of a member of the sociology faculty, culminating in the presentation and defense of a thesis reporting the research.

Contact department for information to register for this course.

SOCY386**Experiential Learning**

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Restriction: Permission of BSOS-Sociology department; and junior standing or higher.

To register, students must have departmental permission form signed by instructor and by Coordinator of Sociology Undergraduate Program.

Contact department for information to register for this course.

SOCY398T**Special Topics in Sociology; Identity and Culture in Italy: A Comparative Approach**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest to both sociology majors and non-majors.

Contact department for information to register for this course.

SOCY399**Independent Study in Sociology**

(Perm req)

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Integrated reading or research under the direction and supervision of a faculty member. A maximum of 6 credits may be earned by a student for the same field experience in SOCY386 and SOCY399 combined.

No more than 6 hours of 399 is allowed for credit.

Contact department for information to register for this course.

SOCY404**SOCY Programming and Data Visualization**

Credits: 3 Grading Method: Regular

Prerequisite: SOCY201.

A course designed to teach quantitative programming and data visualization.

0101	Alan NeustadtI	Seats (Total: 20)
	TuTh 9:30am - 10:45am	ASY 1101

SOCY410**Social Demography**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses; or permission of BSOS-Sociology department.

Types of demographic analysis; demographic data; population characteristics; migration; mortality; fertility; population theories; world population growth; population policy.

0101	Sonalde Desai, Omkar Joshi	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	ASY 3207

SOCY411 Demographic Techniques

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: (SOCY201; or students who have taken courses with comparable content may contact the department); and SOCY410. Or permission of BSOS-Sociology department.

Basic techniques for analyzing population structure and demographic processes, including fertility, mortality and migration.

0101	Joan Kahn	Seats (Total: 29)
	TuTh 11:00am - 12:15pm	ASY 3207

SOCY424 Sociology of Race Relations

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses; or permission of BSOS-Sociology department. Cross-listed with AAST424. Credit only granted for: AAST424 or SOCY424.

Analysis of race-related issues, with a primary focus on American society. The historical emergence, development, and institutionalization of racism; the impact of racism on its victims; and racially based conflict.

0101	Kris Marsh	Seats (Total: 29)
	TuTh 11:00am - 12:15pm	ASY 3203

SOCY428 Research in Inequality

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

This is the special topics research course for Stratification and Inequality.

0101	Reeve Vanneman	Seats (Total: 26)
	TuTh 11:00am - 12:15pm	ASY 3221

SOCY431 Principles of Organizations

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses; or permission of BSOS-Sociology department.

Structural and processual characteristics of organizations that make them effective for different purposes and in different environments. Effects of different institutional environments, small group processes, organizational networks, and leadership. Types of organizations studied include formal bureaucracies, professional organizations, and voluntary associations.

0101	Robert Pernick	Seats (Total: 29)
	MWF 10:00am - 10:50am	ASY 2309

SOCY432 Social Movements

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses; or permission of BSOS-Sociology department.

Movements that seek change in the social and political structure of society. Origins, tactics, organization, recruitment, and success. Case studies come from such movements as labor, civil rights, student, feminist, environmental, neighborhood, and gay rights.

0101	Wayne Santoro	Seats (Total: 29)
	TuTh 9:30am - 10:45am	TWS 1320

SOCY441 Social Stratification and Inequality

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses; or permission of BSOS-Sociology department. Restriction: Junior standing or higher.

The sociological study of social class, status, and power. Topics include theories of stratification, correlates of social position, functions and dysfunctions of social inequality, status inconsistency, and social mobility.

0101	Meredith Kleykamp	Seats (Total: 80)
	TuTh 9:30am - 10:45am	ASY 2309

SOCY442 The Black Middle Class

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses. Credit only granted for: SOCY498T or SOCY442. Formerly: SOCY498T.

Students will learn about the Black Middle Class. They will examine and explore the historical context that led to the rise of a Black Middle Class. Innovative avenues into the Black Middle Class will also be examined, including various household and family formations. Finally, the course will cover the consequences of being in the The Black Middle Class, with an emphasis on residential segregation and racial identity.

0101	Kris Marsh	Seats (Total: 29)
	TuTh 12:30pm - 1:45pm	ASY 3203

SOCY448G Research in Social Psychology; Group Processes

Credits: 3 Grading Method: Regular,
Audit

This is the special topics research course in Social Psychology

0101	Jeffrey Lucas	Seats (Total: 29)
	MW 1:00pm - 1:50pm	ASY 3211
	Class time/details on ELMs	ONLINE

SOCY457 Sociology of Law

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Social, political, and cultural sources of legal norms and concepts; and how the law shapes society and society shapes the law using sociological theoretical frameworks. The role of social change, social reproduction and inequality (including race, class, gender, and sexuality) to achieve certain objectives such as compliance, deterrence and social control.

0101	Dawn Dow	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	EDU 3233

SOCY470 Sociology of Contraception and Unintended Pregnancy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 6 credits in SOCY courses; or permission of Department.

Students will participate in a sociological examination of contraceptive practices and unintended pregnancies.

0101	Monica Caudillo	Seats (Total: 29)
	MWF 1:00pm - 1:50pm	HBK 1108

SOCY498F Selected Topics in Sociology; Race and Reproduction

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest to advanced undergraduates in sociology. Such courses will be offered in response to student request and faculty interest.

Cross-listed with AASP499C, AMST498E, SOCY699B and WMST428C. Credit only granted for AASP499C, AMST498E, SOCY498F, SOCY699B or WMST428C.

0101	Sangeetha Madhavan	Seats (Total: 35)
	W 2:00pm - 4:30pm	ASY 3203

SOCY498U Selected Topics in Sociology; Sociology of Arts

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest to advanced undergraduates in sociology. Such courses will be offered in response to student request and faculty interest.

Contact department for information to register for this course.

SOCY601 Statistics For Sociological Research I

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: SOCY201; or students who have taken courses with comparable content may contact the department. Restriction: Permission of instructor. Credit only granted for: SOCY601 and SURV601.

Introductory statistical concepts are covered including descriptive statistics, probability, sampling distributions, expected values, hypothesis testing, tests of significance, measures of association, and if time permits, introduction to regression analysis. Statistical programming software may be used.

0101	Amelia Branigan	Seats (Total: 20)
	TuTh 2:00pm - 3:20pm	ASY 1101

SOCY616 Sociology Pro-Seminar

Credits: 1 Grading Method: Sat-Fail

Restriction: Must be in Sociology (Doctoral) program. Credit only granted for: SOCCY699P or SOCY616. Formerly: SOCY699P.

The proseminar is the guide to Sociology as a profession, and how sociology is practiced here at the University of Maryland. The goal of the course is to help students gain insider knowledge about how to develop sociological knowledge and capabilities, and what it means to practice sociology as a graduate student and beyond. The course will discuss both practical aspects of professional life in general and specific topics of interest.

0101	Liana Sayer	Seats (Total: 20)
	F 10:00am - 10:50am	ASY 1101

SOCY623 Families and Modern Social Theory

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in one of the following programs (Sociology (Doctoral); Sociology (Master's)) ; or permission of instructor.

Modern families will be explored by combining core theories of modernity with key theoretical debates about families and intimate relationships (economics and economic sociology, gender, race), and social change (development and new family forms).

0101	Philip Cohen	Seats (Total: 29)
	W 6:30pm - 9:00pm	ASY 1101

SOCY625 Activism and Global Movements

Credits: 3 Grading Method: Regular

Restriction: Must be enrolled in a Sociology (SOCY) graduate program; or permission of instructor.

An introduction to the research on activism, focusing particularly on the global and transnational aspects of activism and social movements. The course begins with an overview of the theoretical literature on activism and social movements. Then, we will focus on case studies of particular movements that have a global component and have been the focus of recent sociological inquiry: the globalization movement, Arab Spring, and the climate/climate justice movement.

0101	Dana Fisher	Seats (Total: 20)
	W 3:30pm - 6:00pm	ASY 2115

SOCY630 Population and Society

Credits: 3 Grading Method: Regular, Audit

Selected problems in the field of population; quantitative and qualitative aspects; American and world problems.

0101	Feinian Chen	Seats (Total: 29)
	M 3:30pm - 6:00pm	ASY 1101

SOCY661 Social Stratification

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of instructor.

Major theoretical and research problems in the sociology of social stratification. The characteristics, correlates, and consequences of class and status stratification; the distribution of power; the relationship of social stratification to ideology and the institutional orders of society.

0101	Andres Villarreal, Wei-hsin Yu	Seats (Total: 15)
	W 3:30pm - 6:00pm	ASY 1101

SOCY699 Special Social Problems

Credits: 1-16 Grading Method: Regular

Contact department for information to register for this course.

SOCY699B Special Social Problems; Race and Reproduction

Credits: 3 Grading Method: Regular,
Audit

0101	Sangeetha Madhavan	Seats (Total: 35)
	W 2:00pm - 4:30pm	ASY 3203

SOCY699C Special Social Problems; Introduction to Computing for Sociologists

Credits: 1 Grading Method: Regular, Audit

0101	Amelia Branigan	Seats (Total: 20)
	F 2:00pm - 4:00pm	LEF 0231

SOCY699D Special Social Problems; Logic of Social Inquiry

Restricted to Sociology Graduate Students

0101	Long Doan	Seats (Total: 20)
	Tu 3:30pm - 6:00pm	ASY 1101

SOCY699E Special Social Problems; Critical Race Initiative

(Perm req)

Credits: 1 Grading Method: Regular,
Audit

Restriction: Permission of Instructor required. Please contact instructor or department for details.

0101	Dawn Dow	Seats (Total: 10)
	F 11:00am - 11:50am	Location: TBA

SOCY699J Special Social Problems; Measuring Women's Empowerment in Developing Countries: A Research Practicum

Credits: 3 Grading Method: Regular,
Audit

0101	Sonalde Desai, Feinian Chen, Amy McLaughlin	Seats (Total: 10)
	Tu 10:00am - 12:30pm	ASY 4111

SOCY699M Special Social Problems; Pro-Seminar for BA/MA Students

(Perm req)

Credits: 1 Grading Method: Regular,
Audit

Restricted to students in the 5-Year BA/MA Sociology program.

0101	Brian Connor	Seats (Total: 10)
	M 12:00pm - 1:00pm	ASY 2115

SOCY789 Advanced Special Topics in Social Stratification; Race and Ethnicity

Credits: 3 Grading Method: Regular,
Audit

An intensive examination of an area of interest in the field, including such topics as macrostratification; measurement of prestige; institutional variation in status attainment.

0101	Dawn Dow	Seats (Total: 29)
	Th 3:30pm - 6:00pm	ASY 1101

SOCY799

Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

SOCY819

Research Seminar in Social Psychology

Credits: 1 Grading Method: Regular,
Audit

An advanced research seminar for students preparing to do research or take comprehensive examinations in social psychology.

0101	Jeffrey Lucas	Seats (Total: 10)
	Contact instructor or department for details.	

SOCY829

Research Seminar in Sociological Theory

Credits: 1 Grading Method: Regular,
Audit

An advanced research seminar for students preparing to do research or take comprehensive examinations in sociological theory.

0101	Meyer Kestnbaum	Seats (Total: 10)
	Contact instructor or department for details.	

SOCY849

Research Seminar in Demography

Credits: 1 Grading Method: Regular,
Audit

An advanced research seminar for students preparing to do research or take comprehensive examinations in demography.

0101	Sonalde Desai	Seats (Total: 10)
	Contact instructor or department for details.	

SOCY858

Research Seminar in Gender, Work and Family

Credits: 1 Grading Method: Regular,
Audit

An advanced research seminar for students preparing to do research or take the specialty examination in Gender, Work and Family.

0101	Liana Sayer	Seats (Total: 10)
Contact instructor or department for details.		

SOCY869 Research Seminar in Military Sociology

Credits: 1 Grading Method: Regular,
Audit

An advanced research seminar for students preparing to do research or take comprehensive examinations in military sociology.

0101	Meredith Kleykamp	Seats (Total: 10)
Contact instructor or department for details.		

SOCY889 Research Seminar in Social Stratification

Credits: 1 Grading Method: Regular,
Audit

An advanced research seminar for students preparing to do research or take comprehensive examinations in stratification.

0101	Philip Cohen	Seats (Total: 10)
Contact instructor or department for details.		

SOCY898 Pre-Candidacy Research

(Perm req)

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

SOCY899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular

Contact department for information to register for this course.

SPAN Spanish

Fall 2019

SPAN103 Intensive Elementary Spanish

Credits: 4 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have appropriate Foreign Language Placement Test (FLPT) score. Restriction: Must not be a native/fluent speaker of Spanish. Credit only granted for: SPAN102 or SPAN103.

Covers speaking, reading, writing, listening, and culture of Spanish-speaking world.

0101	Elisa Gironzetti	Seats (Total: 25)
	MWF 10:00am - 10:50am	JMZ 0103
	Tu 10:00am - 10:50am	JMZ 0103
0201	Ligia Gonzalez	Seats (Total: 25)
	MWF 11:00am - 11:50am	TYD 1114
	Tu 11:00am - 11:50am	JMZ 0125
0301	Charis Gozzo	Seats (Total: 25)
	MWF 12:00pm - 12:50pm	JMZ 1120
	Tu 12:00pm - 12:50pm	JMZ 1120
0401	Roberto Katrandjiyski	Seats (Total: 25)
	MWF 1:00pm - 1:50pm	JMZ 0122
	Tu 1:00pm - 1:50pm	JMZ 0122
0501	Olga Morozova	Seats (Total: 25)
	MWF 2:00pm - 2:50pm	JMZ 2117
	Tu 2:00pm - 2:50pm	JMZ 2117

SPAN169O Special Topics in Study Abroad I; Beginner Spanish I

Credits: 6 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN169P Special Topics in Study Abroad I; Beginner Spanish II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN169X Special Topics in Study Abroad I; Elementary Spanish I

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN169Y Special Topics in Study Abroad I; Elementary Spanish II

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN203 Intensive Intermediate Spanish

Credits: 4 Grading Method: Regular, CORE: HO
Pass-Fail, Audit

Prerequisite: SPAN103; or must have appropriate Foreign Language Placement Test (FLPT) score.

Restriction: Must not be a native/fluent speaker of Spanish.

Covers speaking, reading, writing, listening, and culture of Spanish-speaking world.

0201	Katherin Solano	Seats (Total: 25)
	MWThF 10:00am - 10:50am	JMZ 1124
0301	Mariana Mazer	Seats (Total: 25)
	MWF 11:00am - 11:50am	JMZ 1117
	Th 11:00am - 11:50am	PLS 1111
0401	Jose Magro	Seats (Total: 25)
	MWF 11:00am - 11:50am	JMZ 1120
	Th 11:00am - 11:50am	JMZ 1120
0601	Maria Herrera Arvay	Seats (Total: 25)
	MWF 1:00pm - 1:50pm	JMZ 0118
	Th 1:00pm - 1:50pm	JMZ 1120
0701	Evelyn Canabal-Torres	Seats (Total: 25)
	MWThF 1:00pm - 1:50pm	JMZ 1124
0801	Jose Magro	Seats (Total: 25)
	MWThF 2:00pm - 2:50pm	JMZ 1124

SPAN204 Spanish Grammar Review

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit CORE: HO

Prerequisite: SPAN203; or must have appropriate Foreign Language Placement Test (FLPT) score.
Restriction: Not open to fluent/native speakers of Spanish.

An in-depth study and analysis of selected grammatical topics in a contextualized framework.

0101	Nelida Devesa-Gomez MWF 12:00pm - 12:50pm	Seats (Total: 25) JMZ 2207
0201	Ofelia Montelongo Valencia TuTh 12:30pm - 1:45pm	Seats (Total: 25) JMZ 2207
0301	Ofelia Montelongo Valencia TuTh 11:00am - 12:15pm	Seats (Total: 25) JMZ 2207

SPAN206 Spanish for Heritage Speakers I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Native or near native knowledge of and no formal education in Spanish.

Review of oral and written Spanish for students who have native or near native knowledge of, but no formal education in Spanish. Taught in Spanish.

Offered fall only.

0101	Evelyn Canabal-Torres MWF 10:00am - 10:50am	Seats (Total: 25) JMZ 0118
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SPAN207 Reading and Writing in Spanish

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSHU

Prerequisite: Minimum grade of B+ in SPAN203; or must have completed or be concurrently enrolled in SPAN204; or must have appropriate Foreign Language Placement Test (FLPT) score.

Selected readings with emphasis on reading comprehension and the development of reading strategies. Work in composition writing and a review of selected grammatical topics. Complements material of SPAN204.

0101	Chila Hidalgo MWF 10:00am - 10:50am	Seats (Total: 25) JMZ 3203
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0201	Chila Hidalgo MWF 11:00am - 11:50am	Seats (Total: 25) JMZ 3203
0301	Chila Hidalgo MWF 12:00pm - 12:50pm	Seats (Total: 25) JMZ 0118
0401	Daniela Hernandez TuTh 9:30am - 10:45am	Seats (Total: 25) JMZ 0208
0501	Daniela Hernandez TuTh 11:00am - 12:15pm	Seats (Total: 25) JMZ 0205

SPAN234 Issues in Latin American Studies I

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HO, D General Education: DSHS, DSHU, DVUP

Cross-listed with PORT234, LASC234. Credit only granted for: LASC234, PORT234, or SPAN234.

Interdisciplinary study of major issues in Latin America and the Caribbean, including Latin America's cultural mosaic, migration and urbanization. Democratization and the role of religions. Taught in English.

0101	Sarah Dowman TuTh 3:30pm - 4:45pm	Seats (Total: 30) JMZ 2206
0201	Sarah Dowman TuTh 12:30pm - 1:45pm	Seats (Total: 30) HBK 0105

SPAN269A Special Topics in Study Abroad II; B1 Intermediate Level Spanish I

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN269B Special Topics in Study Abroad II; B1 Intermediate Level Spanish II

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN269D Special Topics in Study Abroad II; Catalan Language and Culture

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN269I Special Topics in Study Abroad II; Intermediate Spanish

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN269L Special Topics in Study Abroad II; Spanish Language B1

Credits: 6 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN301 Advanced Grammar and Composition I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in SPAN207.

*Practice of complex grammatical structures through reading and writing of compositions and essays.
Specific lexical, syntactic, rhetorical, and stylistic devices will be highlighted.*

0101	Mariluz Bort Caballero	Seats (Total: 20)
	MWF 10:00am - 10:50am	JMZ 0205
0201	Ana Acedo Garcia	Seats (Total: 20)
	MWF 2:00pm - 2:50pm	JMZ 1117
0301	Mariluz Bort Caballero	Seats (Total: 20)
	MWF 12:00pm - 12:50pm	JMZ 2117
0501	Sarah Dowman	Seats (Total: 20)
	TuTh 9:30am - 10:45am	JMZ 1226

0601	Ana Claudia Dos Santos Sao Bernardo TuTh 11:00am - 12:15pm	Seats (Total: 20) JMZ 1226
0701	Jackson Monzon TuTh 12:30pm - 1:45pm	Seats (Total: 20) JMZ 2125
0801	Jackson Monzon TuTh 2:00pm - 3:15pm	Seats (Total: 20) JMZ 1103

SPAN302
Advanced Grammar and Composition II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: SPAN301.

Practice in and writing of different types of compositions and essays, including narrations, descriptions, and persuasive writing. Review of problematic syntactical structures.

Contact department for information to register for this course.

SPAN303
Approaches to Cultural Materials in the Hispanic World

Credits: 3 Grading Method: Regular, General Education: DSHU
Pass-Fail, Audit

Prerequisite: SPAN301. Recommended: May elect to take SPAN311 and/or SPAN316 in same semester as SPAN303.

Development of proficiency in critical thought through the reading, viewing, and analytical discussion of major genres and styles of cultural materials selected from Spanish-speaking world. Taught in Spanish.

0101	Chris Lewis MWF 10:00am - 10:50am	Seats (Total: 20) JMZ 2122
0201	Chris Lewis MWF 11:00am - 11:50am	Seats (Total: 20) JMZ 0103
0301	Cecilia Battauz MWF 1:00pm - 1:50pm	Seats (Total: 20) JMZ 2122
0401	Nidia Reyes TuTh 9:30am - 10:45am	Seats (Total: 20) JMZ 2122

0501	Sofia Maurette TuTh 11:00am - 12:15pm	Seats (Total: 20) JMZ 3120
0601	Carmen Benito-Vessels TuTh 12:30pm - 1:45pm	Seats (Total: 20) JMZ 3120
0701	Hernan De Pinillos TuTh 2:00pm - 3:15pm	Seats (Total: 20) JMZ 3120

SPAN306
Spanish for Heritage Speakers II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: SPAN206.

Practice of complex grammatical structures through reading and writing of compositions and essays. Specific lexical, syntactic, rhetorical and stylistic devices will be highlighted. Designed for Spanish speakers educated in English. Taught in Spanish.

0101	Evelyn Canabal-Torres MWF 11:00am - 11:50am	Seats (Total: 25) JMZ 0208
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SPAN311
Advanced Communication I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: SPAN301; and must have completed or be concurrently enrolled in SPAN303.

Restriction: Must not be a native/fluent speaker of Spanish.

Further development of listening, speaking, and writing skills in Spanish. Opportunity to develop oral and written fluency, improve pronunciation and increase vocabulary. Individual and/or group oral presentations. Taught in Spanish.

0101	Ana Acedo Garcia MWF 1:00pm - 1:50pm	Seats (Total: 20) JMZ 2117
0201	Ana Acedo Garcia MWF 11:00am - 11:50am	Seats (Total: 20) JMZ 2117
0301	Manel Lacorte TuTh 12:30pm - 1:45pm	Seats (Total: 20) JMZ 2117

SPAN316**Spanish Translation I**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: SPAN301; and must have completed or be concurrently enrolled in SPAN303.

Translation of texts into Spanish and/or English. Taught in Spanish.

0101	Luis Charry	Seats (Total: 20)
	MWF 10:00am - 10:50am	JMZ 1224
0201	Luis Charry	Seats (Total: 20)
	MWF 11:00am - 11:50am	JMZ 0205
0301	Ginette Eldredge	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	JMZ 0208

SPAN317**Translation II**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: SPAN316.

Translation of non-literary, non-technical texts into Spanish and/or English.

Contact department for information to register for this course.

SPAN325**Hispanic Linguistics I: Phonetics and Phonology**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: SPAN303; and (SPAN311 or SPAN316). Credit only granted for: SPAN310 or SPAN325. Formerly: SPAN310.

Descriptive study of the Spanish sound system. Practice in phonetic perception, transcription, and articulation. Particular attention to sentence phonetics; juncture, rhythm, stress, pitch. Taught in Spanish.

0101	Ana Acedo Garcia	Seats (Total: 25)
	MWF 12:00pm - 12:50pm	JMZ 2120

SPAN331**Spanish Culture, Civilization and Literature I: Medieval Times**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHU

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

The exploration of cultures of the Iberian Peninsula from its origins until the 15th century as well as the study of historical and political events that gave rise to the Spanish state. Taught in Spanish.

0101	Hernan De Pinillos	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	JMZ 1224

SPAN332 Spanish Culture, Civilization and Literature II: Renaissance and Baroque

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSHU

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

An overview of cultural and literary production of Spain from the late 15th through late 17th centuries, exploring the production of literary texts in their socio-historical, political, religious and cultural contexts and development. Taught in Spanish.

Contact department for information to register for this course.

SPAN333 Spanish Culture, Civilization and Literature III: Modern Times

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSHU

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

An overview of cultural and literary production of Spain from the late 17th century through the present day, exploring the production of literary texts in their socio-historical, political, religious and cultural contexts and development. Taught in Spanish.

0101	Jose Naharro-Calderon	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	JMZ 1224

SPAN359L Spanish for the Professions; Spanish in the Life Sciences

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Exploration of cultural and linguistic skills for different professional contexts including vocabulary, listening, speaking, reading and strategies. No experience in the professional area necessary. Taught in Spanish.

Prerequisite: SPAN303 and (SPAN311 or SPAN316) SPAN359L is designed to strengthen students oral and written communication and critical thinking skills in Spanish through the study of science-related materials. The course engages students in class discussions about a variety of topics in different formats (book chapters, articles, film, art, and literary works). The course is divided in five units that will allow the study of specific geographies, topics and cases in the Spanish-speaking world. Assignments include writing a research proposal and visiting the National Zoo and the National Museum of Natural History. No specific technical knowledge is necessary but we cover a variety of topics that are for science-oriented or science-interested students. Taught in Spanish.

0101	Daniela Bulansky	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	JMZ 2122

SPAN359O Spanish for the Professions; Spanish in the Law

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Exploration of cultural and linguistic skills for different professional contexts including vocabulary, listening, speaking, reading and strategies. No experience in the professional area necessary. Taught in Spanish.

Prerequisite: SPAN303 and (SPAN311 or SPAN316) SPAN359O offers students the opportunity to enhance Spanish linguistic and intercultural communication skills in contexts of legal practice. Students will learn how to apply these language and cultural skills as future legal practitioners interacting with clients who possess limited English proficiency. The goal of the class is to enable students to, at a minimum, conduct intake interviews with a Spanish-speaking client without the assistance of an interpreter in a culturally competent fashion. The course is designed to be beneficial for students with varying levels of Spanish language ability, up to and including students who are native speakers or heritage speakers of Spanish. Taught in Spanish.

0101	Jose Magro	Seats (Total: 20)
	MWF 1:00pm - 1:50pm	JMZ 2206

SPAN361 Latin American Literatures and Cultures I: From Pre-Columbian to Colonial Times

Credits: 3 Grading Method: Regular, General Education: DSHU,
Pass-Fail, Audit DVUP

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

Overview of cultural history of Latin America from pre-Columbian civilizations to the Colonial period, exploring the foundations of the Spanish American cultural and literary tradition to approximately 1770. Taught in Spanish.

0101	Juan Carlos Quintero-Herencia	Seats (Total: 25)
	MWF 10:00am - 10:50am	JMZ 0125

0201	Ginette Eldredge	Seats (Total: 25)
	TuTh 9:30am - 10:45am	JMZ 1117

SPAN362 Latin American Literatures and Cultures II: From Independence to Nation Formation

Credits: 3 Grading Method: Regular, General Education: DSHU,
 Pass-Fail, Audit DVUP

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

An overview of cultural and literary production of Latin America from the 18th Century to approximately 1900, exploring the production of literary texts in their socio-historical, political, and cultural contexts and development. Taught in Spanish.

Contact department for information to register for this course.

SPAN363 Latin American Literatures and Cultures III: From Modernism to Neo-Liberalism

Credits: 3 Grading Method: Regular, General Education: DSHU,
 Pass-Fail, Audit DVUP

Prerequisite: SPAN303; and (SPAN311 or SPAN316).

An overview of cultural and literary production of Latin America from the late 19th through the early 21st centuries, exploring the production of literary texts in their socio-historical, political, and cultural contexts and development. Taught in Spanish.

0101	Laura Demaria	Seats (Total: 25)
	MWF 1:00pm - 1:50pm	JMZ 1215
0201	Saul Sosnowski	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	JMZ 2206

SPAN369A Special Topics in Study Abroad III; Advanced Oral Communication in Spanish

Credits: 1 Grading Method: Regular,
 Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369B Special Topics in Study Abroad III; Advanced Academic Writing in Spanish

Credits: 1 Grading Method: Regular,
 Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369F Special Topics in Study Abroad III; Spanish Oral Skills through Theatre

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369G Special Topics in Study Abroad III; Spanish for the Health Professional

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369J Special Topics in Study Abroad III; Spanish Grammar and Expression

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369M Special Topics in Study Abroad III; Spanish Language B2

Credits: 6 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369O Special Topics in Study Abroad III; Spanish Conversation and Oral Skills

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369P Special Topics in Study Abroad III; Spanish Oral Techniques

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369Q Special Topics in Study Abroad III; Spanish Phonetics and Phonology

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369R Special Topics in Study Abroad III; Advanced Reading Skills in Spanish

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369V Special Topics in Study Abroad III; Advanced Present-Day Spanish Usage

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369W Special Topics in Study Abroad III; Spanish Stylistics: Advanced Spanish Writing and Stylistics

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369Y Special Topics in Study Abroad III; B2 Advanced Level Spanish 1

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN369Z Special Topics in Study Abroad III; B2 Advanced Level Spanish 2

Credits: 6 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN370

Spanish for Business I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: SPAN303; and (SPAN311 or SPAN316). Credit only granted for: SPAN315 or SPAN370. Formerly: SPAN315.

Business Spanish terminology, vocabulary and practices. Emphasis on everyday spoken and written Spanish. Readings and discussions of Spanish commercial topics. May include exposure to Spanish commercial topics. May include exposure to Spanish business environments. Taught in Spanish.

0101	Chila Hidalgo	Seats (Total: 25)
	MWF 2:00pm - 2:50pm	JMZ 1215
0201	Lisa Carney	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	JMZ 2117

SPAN386

Experiential Learning

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Prerequisite: Permission of ARHU-School of Languages, Literatures, and Cultures department. Restriction: Junior standing or higher.

Contact department for information to register for this course.

SPAN399

Independent Study in Spanish

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Specific readings in literature or a translation project under the supervision of a faculty member of the department.

Prerequisite: permission of department.

Contact department for information to register for this course.

SPAN401

Advanced Composition I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: SPAN302; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Compositions and essays with emphasis on stylistics, idiomatic and syntactic structures. Organization and writing of research papers.

Contact department for information to register for this course.

SPAN402 Advanced Composition II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: SPAN401; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Compositions and essays with emphasis on stylistics, idiomatic and syntactic structures. Organization and writing of research papers.

Contact department for information to register for this course.

SPAN408Q Special Topics in Iberian and Latin American Studies; Culinary Landscapes: Food, Sabor and Image in Hispanic Caribbean Texts

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics in (a) the literature and film of Spain, Spanish-speaking Latin America, and U.S. Latina/o communities; (b) Spanish linguistics; and (c) Spanish, Latin American, and U.S. Latino cultural studies. Each topic will be announced when the course is offered.

Relevant Hispanic Caribbean literary, musical and historical texts display their images in a culinary space. Images of food, but more specifically, of sabor (flavor, taste: a knowledge coming from flavor) work as metaphors, and as landscapes or seascapes, for the configuration of a singular aesthetic and political experience. Specifically, the course will discuss the corporeal and sensorial realities excited by this culinary imaginary. Issues of identity, race, gender, politics, and literary representation will be discussed, problematized and questioned. Furthermore, during this class we will put in motion our own critical skills while reading or listening to texts or cultural objects produced in a Hispanic Caribbean society. Students will be expected to participate actively in class, give an oral presentation, write short essays, a final research paper and complete miscellaneous assignments. Taught in Spanish.

0101	Juan Carlos Quintero-Herencia	Seats (Total: 25)
	MWF 11:00am - 11:50am	JMZ 0125

SPAN408R Special Topics in Iberian and Latin American Studies; Keeping the Study of Spanish Exiles Alive in our Hearts

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics in (a) the literature and film of Spain, Spanish-speaking Latin America, and U.S. Latina/o communities; (b) Spanish linguistics; and (c) Spanish, Latin American, and U.S. Latino cultural studies. Each topic will be announced when the course is offered.

Exile is a global and political phenomenon that touches nations throughout history. It is humanly disastrous, and displaces millions of refugees, identified by international conventions since 1922. Many displacements have also shaped intellectual legacies: Picasso's "Guernica," or our 1956 Nobel for Literature Laureate, Juan Ramon Jimenez's poetry. Some confuse expulsions based on religious faith prior to exiles after the formation of nation-states. The former had widely plagued Europe's monarchies, and the latter touched democracies during the rise of totalitarianisms that led, among other conflicts, to the Civil War against the Second Spanish Republic, and the fleeing of about half a million Spaniards (1936-39). Latin America, and particularly Mexico, welcomed close to 50,000, while the USA was restrictive in accepting emigres. Therefore, it was a cataclysm with local and international Italian Fascist and Nazi plotting roots, the dismal Non-Intervention Society of Nations policies, and the US arms embargo. An anticipation of WWII. The course explores cultural and memory expressions of Spain's exiles. Taught in Spanish.

0101	Jose Naharro-Calderon	Seats (Total: 25)
	TuTh 12:30pm - 1:45pm	JMZ 1215

SPAN408T Special Topics in Iberian and Latin American Studies; Guita = Money: Reflecting on Neoliberalism and Contemporary Southern Cone Culture

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics in (a) the literature and film of Spain, Spanish-speaking Latin America, and U.S. Latina/o communities; (b) Spanish linguistics; and (c) Spanish, Latin American, and U.S. Latino cultural studies. Each topic will be announced when the course is offered.

There is always money; it is everywhere, no matter what we do. Even time and space have been monetized, while, capital and commodities are constantly being exchanged. Art, books, authors, and music, play a key role in the global market. This seminar will explore how neoliberalism and its market-driven economy have shaped Latin American culture of the last decades. Particularly, we will explore how contemporary cultural artifacts are inscribed into a value system that quantifies the unquantifiable, that is to say, a system that only values a book or an artist based on sales. Under this logic, Isabel Allende is one of the most influential Latin American literary figures of our time. In this class, we will work with a variety of cultural artifacts from Argentina, Chile, and Uruguay films, chronicles, music, newspapers, cartoons, literature, and documentaries to map how culture and markets intersect. Taught in Spanish.

0101	Laura Demaria	Seats (Total: 25)
	MW 3:00pm - 4:15pm	JMZ 2120

SPAN408V Special Topics in Iberian and Latin American Studies; Love, Science, Religion and the Pursuit of Criollo Independence in 18th-Century Mexico

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics in (a) the literature and film of Spain, Spanish-speaking Latin America, and U.S. Latina/o communities; (b) Spanish linguistics; and (c) Spanish, Latin American, and U.S. Latino cultural studies. Each topic will be announced when the course is offered.

This course will explore the 18th century from the periphery of traditionally studied centers of Enlightenment. By focusing on pre-independence Mexico, we will study the emergence of alternative scientific and religious discourses in an American context that leads to social and political changes at the onset of the 19th-century. Students will watch the Mexican telenovela *Alborada* (2005-6), which fictionally explores many of the topics that are relevant for the course, and read a variety of materials on the following subtopics: imperial designs, cultural production, inquisitional realities, medical discourse, individual and political rights, criollo consciousness, etc. Taught in Spanish.

0101	Eyda Merediz	Seats (Total: 25)
	MWF 1:00pm - 1:50pm	JMZ 1122

SPAN408Y Special Topics in Iberian and Latin American Studies; Contemporary Spanish Short Story

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics in (a) the literature and film of Spain, Spanish-speaking Latin America, and U.S. Latina/o communities; (b) Spanish linguistics; and (c) Spanish, Latin American, and U.S. Latino cultural studies. Each topic will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409F Great Themes of the Hispanic Literatures; Literary Myths and Philosophy in the European Tradition

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409L Great Themes of the Hispanic Literatures; 20th Century and Contemporary Latin American Short Story

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409O Great Themes of the Hispanic Literatures; Images of Spain in Contemporary Cinema

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409W Great Themes of the Hispanic Literatures; Women Writers of Spain

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409X Great Themes of the Hispanic Literatures; The Spanish Mystery Novel

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN409Y Great Themes of the Hispanic Literatures; Filmmaking in Spain

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Pervading themes in the literature of Spain or Spanish-America. Each theme will be announced when the course is offered.

Contact department for information to register for this course.

SPAN422 Intercultural Communication and Negotiation

Credits: 3 Grading Method: Regular, General Education: DVCC
Pass-Fail, Audit

Prerequisite: SPAN370 OR SPAN371 OR SPAN373 OR SPAN 374. Restriction: Junior standing or higher.

Focuses on the relationship of language and culture of those operating in world markets. Particular attention will be given to intercultural communication, linguistic systems, culture specific perceptions of, and negotiation with, the Spanish-speaking world. Taught in Spanish.

Contact department for information to register for this course.

SPAN425 Hispanic Linguistics II: Structures of Spanish

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: SPAN303; and SPAN311 or SPAN316 or SPAN325.

This course begins with an introduction to general concepts in linguistics, from language function and the brain to communication, culture, and thought, and their relation to other disciplines in the social sciences. The main purpose of this course is to provide an overview of Hispanic linguistics through multiple perspectives, while exploring the areas of Spanish morphology, syntax, and semantics. This course will also focus on the structural tendencies of Spanish through a variety of practical activities. Taught in Spanish.

Jointly offered with SPAN625. Credit granted for SPAN425 or SPAN625.

0101	Juan Uriagereka	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	JMZ 3120

SPAN449J Special Topics in Spanish Civilization; Mosaic: Jews, Muslims and the Spanish Experience

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An intensive study of a selected topic related to Spanish civilization.

Contact department for information to register for this course.

SPAN449Z Special Topics in Spanish Civilization; Barcelona/ Madrid: Literature & Film in the Contemporary City

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An intensive study of a selected topic related to Spanish civilization.

Contact department for information to register for this course.

SPAN462 Twentieth Century Drama

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: SPAN333, SPAN361, SPAN331, SPAN332, SPAN362, or SPAN363.

Significant plays of the twentieth century.

Contact department for information to register for this course.

SPAN463 Latin American Drama

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: SPAN333, SPAN361, SPAN331, SPAN332, SPAN362, or SPAN363.

Emphasis will be placed on Latin American plays of the twentieth century.

Contact department for information to register for this course.

SPAN464 Contemporary Spanish Poetry

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: SPAN333, SPAN361, SPAN331, SPAN332, SPAN362, or SPAN363.

Spanish poetry from the generation of 1927 to the present.

Contact department for information to register for this course.

SPAN469C Study Abroad Special Topics IV; Composition

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN469D Study Abroad Special Topics IV; Chilean History

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

SPAN479 Honors Thesis

(Perm req)

Credits: 3-6 Grading Method: Regular,
Pass-Fail, Audit

Researching and writing an honors thesis under the direction of a professor.

Contact department for information to register for this course.

SPAN495 Honors Reading

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must be in Spanish and Portuguese Honors; or permission of ARHU-School of Languages, Literatures, and Cultures department.

Supervised reading.

Contact department for information to register for this course.

SPAN605 Teaching Spanish I

Credits: 1 Grading Method: Regular, Audit

Prerequisite: Permission of ARHU-School of Languages, Literatures, and Cultures department.

Restriction: Must be a Spanish teaching assistant.

Methods and materials for teaching Spanish in higher education.

0101	Elisa Gironzetti	Seats (Total: 15)
	M 3:00pm - 3:50pm	JMZ 3205

SPAN625 Introduction to Hispanic Linguistics I: Basic Concepts

Credits: 3 Grading Method: Regular,
Audit

Introduction to basic terms and definition in Hispanic Linguistics. Fundamental aspects of phonology, morphology, syntax, semantics, sociolinguistics, and pragmatics.

Jointly offered with SPAN425. Credit granted for SPAN425 or SPAN625.

0101	Juan Uriagereka	Seats (Total: 20)
	TuTh 3:30pm - 4:45pm	JMZ 3120

SPAN699 Independent Study in Spanish

Credits: 1-3 Grading Method: Regular, Audit

This course is designed to provide graduate students an opportunity to pursue independent study under the supervision of a member of the department.

Contact department for information to register for this course.

SPAN798G **Open Seminar; Words in History**

Credits: 3 Grading Method: Regular,
Audit

This seminar will explore how the Spanish we speak today dialogues with its history; how knowing the past explains the poetic use of language and the so-called conceptual and ideological Spanish metaphors. We will study language as a being (Dasein), how language use reveals the time period, the geopolitical configuration, the genre, the authorial hand, and ultimately our own human specificity. We depart from the basic idea that the Spanish language is the most complex and comprehensive tool we use for literature. Language is one of very few elements that, with its variations, trace common paths in the entire Hispanic World. Students will research the political, social, literary implications as present in the writings of contemporary authors and will be able to explain the variations from medieval, renaissance and baroque Spanish authors. Taught in Spanish.

0101	Carmen Benito-Vessels	Seats (Total: 10)
	Tu 3:30pm - 6:00pm	JMZ 1226

SPAN798I Open Seminar; Gender and Sexuality in Mexican Literature

Credits: 3 Grading Method: Regular,
 Audit

This seminar presents us with the opportunity to study the interrelated topics of gender, sexuality, literary representation, and power through the critical interpretation of Mexican literary texts, primarily from the 20th century and the present. We will read literary and theoretical texts alongside one another, asking how both types of text help us think about the topics that present points of contact and divergence among them. We will read from theories of feminism, queerness, and affect, among others. We will study works by a range of writers, including Ines Arredondo, Luis Zapata, Cristina Rivera Garza, Sara Uribe, and Guadalupe Nettel. Taught in Spanish.

0101	Ryan Long	Seats (Total: 10)
	W 4:00pm - 6:30pm	JMZ 2125

SPAN798J Open Seminar; Rewriting History, Creating Memories

Credits: 3 Grading Method: Regular,
 Audit

This seminar will focus on Argentine and Uruguayan writers who were forced into exile or lived through in-sile during the last military dictatorship. While some had addressed the official versions of history before the 1970s, others offered alternate strategies as a result of that experience. We ll explore, among others, works by Carlos Liscano, Cristina Peri Rossi and Mauricio Rosencof (Uruguay) and David Vi as, Tununa Mercado and Andr s Rivera (Argentina). Taught in Spanish.

0101	Saul Sosnowski	Seats (Total: 10)
	Th 4:00pm - 6:30pm	JMZ 2120

SPAN799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular, Sat-Fail
Contact department for information to register for this course.

SPAN898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular, Sat-Fail
Contact department for information to register for this course.

SPAN899 Doctoral Dissertation Research

(Perm req) Credits: 6 Grading Method: Regular, Sat-Fail
Contact department for information to register for this course.

SPHL Public Health Fall 2019

SPHL100 Foundations of Public Health

Credits: 3 Grading Method: Regular

Restriction: Must be in a major in SPHL-School of Public Health. Credit only granted for: SPHL100, PHSC300 or SPHL600.

An overview of the goals, functions, and methods of public health. After an introduction to the core concepts and tools used in public health research and practice, applications of these methodologies are considered in the context of current controversies/problems in public health. Students work together to develop strategies for prevention and control that take into consideration different points of view, outside research, and impacts on individuals and communities.

0101	Sylvette La Touche-Howard	Seats (Total: 20)	
	MW 10:00am - 10:50am	HJP 0226	
	F 8:00am - 8:50am	SPH 0305	Discussion
0102	Sylvette La Touche-Howard	Seats (Total: 20)	
	MW 10:00am - 10:50am	HJP 0226	
	F 9:00am - 9:50am	SPH 0225	Discussion
0103	Sylvette La Touche-Howard	Seats (Total: 20)	
	MW 10:00am - 10:50am	HJP 0226	
	F 10:00am - 10:50am	SPH 0305	Discussion
0104	Sylvette La Touche-Howard	Seats (Total: 20)	
	MW 10:00am - 10:50am	HJP 0226	
	F 11:00am - 11:50am	SPH 0305	Discussion

0105	Sylvette La Touche-Howard MW 10:00am - 10:50am F 12:00pm - 12:50pm	Seats (Total: 20) HJP 0226 SPH 0227	Discussion
0106	Sylvette La Touche-Howard MW 10:00am - 10:50am F 1:00pm - 1:50pm	Seats (Total: 20) HJP 0226 SPH 0305	Discussion
0107	Sylvette La Touche-Howard MW 10:00am - 10:50am F 2:00pm - 2:50pm	Seats (Total: 20) HJP 0226 SPH 0305	Discussion
0108	Sylvette La Touche-Howard MW 10:00am - 10:50am F 3:00pm - 3:50pm	Seats (Total: 20) HJP 0226 SPH 0305	Discussion
0109	Sylvette La Touche-Howard MW 10:00am - 10:50am F 11:00am - 11:50am	Seats (Total: 20) HJP 0226 SPH 0227	Discussion
0110	Sylvette La Touche-Howard MW 10:00am - 10:50am F 10:00am - 10:50am	Seats (Total: 20) HJP 0226 SPH 0225	Discussion
0201	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 8:00am - 8:50am	Seats (Total: 20) ESJ 0224 SPH 0307	Discussion
0202	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 9:00am - 9:50am	Seats (Total: 20) ESJ 0224 SPH 0307	Discussion
0203	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 10:00am - 10:50am	Seats (Total: 20) ESJ 0224 SPH 0307	Discussion
0204	Sylvette La Touche-Howard MW 12:00pm - 12:50pm F 11:00am - 11:50am	Seats (Total: 20) ESJ 0224 SPH 0307	Discussion

0205	Sylvette La Touche-Howard	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	ESJ 0224	
	F 12:00pm - 12:50pm	SPH 0307	Discussion
0206	Sylvette La Touche-Howard	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	ESJ 0224	
	F 1:00pm - 1:50pm	SPH 0307	Discussion
0207	Sylvette La Touche-Howard	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	ESJ 0224	
	F 2:00pm - 2:50pm	SPH 0307	Discussion
0208	Sylvette La Touche-Howard	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	ESJ 0224	
	F 3:00pm - 3:50pm	SPH 0307	Discussion
0209	Sylvette La Touche-Howard	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	ESJ 0224	
	F 9:00am - 9:50am	SPH 0227	Discussion
0210	Sylvette La Touche-Howard	Seats (Total: 20)	
	MW 12:00pm - 12:50pm	ESJ 0224	
	F 10:00am - 10:50am	SPH 0227	Discussion

SPHL240

Public Health Engagement

Credits: 2 Grading Method: Regular

Restriction: Must be a transfer student with 60 credits or less; and must be in a major in SPHL-School of Public Health. Additional information: The course will include a significant physical activity component.

Public Health Engagement is a transfer transition course that provides an opportunity for transfer students to engage in the professional culture of the public health field and to build community while navigating a large, public institution. Instructors use research, physical activity, and academic engagement to stimulate community building across all majors within the School of Public Health. Students will engage with public health issues, academic resources, solution-driven grant writing, identity development, faculty and alumni support systems, and group and individual physical activities. A partnership of 3 sectors within the school, this course is taught by an interdisciplinary team fostering public health practice and community building while promoting successful transition, integration and retention.

0101	Lindsey Winter, Amy Lintner	Seats (Total: 24)	
	TuTh 9:30am - 10:45am	SPH 0225	

SPHL246 **Terp Restoration**

(Perm req)

Credits: 1 Grading Method: Regular

Restriction: Students must be undergraduate majors within the School of Public Health; and permission of instructor.

This lab course is designed to assist students in improving academic strategies, learning time management practices, interacting with the faculty and greater campus community, and developing professional career aspirations. The focus will be on an exploration of the academic environment, campus resources, self-discovery tools, and skill development. Utilizing an interactive experience through facilitated discussion that develops positive relationships, students will actively explore academic opportunities offered through the School of Public Health and the University of Maryland.

0101	Renee Stokes	Seats (Total: 24)
	Tu 11:00am - 12:15pm	SPH 0227

SPHL333 **Fundamentals of Teaching and Mentoring for Undergraduate Teaching Assistants**

(Perm req)

Credits: 1 Grading Method: Regular

Corequisite: This course must be taken concurrently with SPHL389 the first term in which a student is a UTA. Restriction: This course is restricted to undergraduate students enrolled in an SPHL major.

Supports the professional and personal development of UG students in the UTEAM program. Must be completed concurrently with the first semester of providing UTEAM support to a specific course. UTEAM members are dedicated student learners who provide peer education support for specific course as part of the teaching team and emphasizes: 1) introduction to teaching, learning, literature and practice, 2) collaboration with other UTEAM members, faculty and staff as a learning community, and 3) reflection on the knowledge and skills developed through course participation.

0101	Brian Glickman, Cynthia Kershaw	Seats (Total: 15)
	Class time/details on ELMs	ONLINE

SPHL399 **Academic Peer Teaching and Mentoring in Public Health**

(Perm req)

Credits: 1-3 Grading Method: Regular

An independent study course for the Undergraduate Teaching and Mentoring (UTEAM) program within the School of Public Health. Students will apply evidence-based research while assisting peers with the understanding and application of course content. Specific responsibilities may vary dependent upon the course instructor. The primary roles of the UTEAM members will be to provide in-class support and/or external course support through review sessions, discussions sessions, laboratory support, group tutoring and office hours.

0101	Sarah Glancy, Renee Stokes	Seats (Total: 4)
	Contact instructor or department for details.	
0102	Cynthia Kershaw	Seats (Total: 4)
	Contact instructor or department for details.	
0103	Cynthia Kershaw	Seats (Total: 4)
	Contact instructor or department for details.	
0111	Sarah Glancy	Seats (Total: 4)
	Contact instructor or department for details.	
0112	Cynthia Kershaw	Seats (Total: 4)
	Contact instructor or department for details.	
0113	Cynthia Kershaw	Seats (Total: 4)
	Contact instructor or department for details.	
0121	Cynthia Kershaw	Seats (Total: 4)
	Contact instructor or department for details.	
0122	Cynthia Kershaw	Seats (Total: 4)
	Contact instructor or department for details.	
0201	Kendall Bustad	Seats (Total: 4)
	Contact instructor or department for details.	
0202	Jessica O'Hara	Seats (Total: 4)
	Contact instructor or department for details.	
0301	Cynthia Kershaw	Seats (Total: 4)
	Contact instructor or department for details.	
0302	Kerry Tripp	Seats (Total: 4)
	Contact instructor or department for details.	
0401	Sandra Saperstein	Seats (Total: 4)
	Contact instructor or department for details.	
0501	Cynthia Kershaw	Seats (Total: 4)
	Contact instructor or department for details.	
0502	Cynthia Kershaw	Seats (Total: 4)
	Contact instructor or department for details.	

SPHL600 Foundations of Public Health

Credits: 3 Grading Method: Regular

Restriction: Must be a graduate student within the School of Public Health. Credit only granted for: SPHL100, PHSC300 or SPHL600.

An overview of the goals, functions, and methods of public health. After an introduction to the core concepts and tools used in public health research and practice, applications of these methodologies are considered in the context of current controversies/problems in public health. Students work together to develop strategies for prevention and control that taken into consideration different points of view, outside research, and impacts on individuals and communities.

0101	Sylvette La Touche-Howard	Seats (Total: 20)	
	Class time/details on ELMs	ONLINE	
	Th 3:00pm - 4:00pm	SPH 0305	Discussion

SPHL601 Core Concepts in Public Health

Credits: 1 Grading Method: Regular

Restriction: Must be a Master's of Public Health (MPH) or Master's of Health Administration (MHA) student within the School of Public Health.

Introduces students to the history, functions, systems, policies, and models of public health practice in the United States and globally. The course offers seminars, interactive activities, and assessments aimed at establishing a baseline understanding of public health necessary for higher level and integrative learning in subsequent public health courses.

0101	Luisa Franzini, Barbara Curbow	Seats (Total: 80)	
	Meets August 26, 2019 - October 11, 2019		
	M 6:30pm - 8:30pm	SPH 1312	
PLB1	Luisa Franzini, Barbara Curbow	Seats (Total: 10)	
	Meets October 14, 2019 - December 9, 2019		
	Class time/details on ELMs	ONLINE	
	<i>Part of the MPH in Behavioral and Community Health program. Graduate students not admitted into this program must contact oes@umd.edu to determine registration eligibility.</i>		

PLH1	Barbara Curbow, Luisa Franzini	Seats (Total: 40)
	Meets October 14, 2019 - November 30, 2019	
	Class time/details on ELMs	ONLINE
	<i>Must be in Public Health Policy & Practice program. For permission to enroll, contact oes@umd.edu.</i>	

SPHL602

Foundations of Epidemiology and Biostatistics

Credits: 4

Grading Method: Regular

Recommended: Recommend SPHL603 as a co-requisite course. Restriction: Must be a graduate student within the School of Public Health. Credit only granted for: SPHL602 or EPIB610 and EPIB650.

An introduction to conceptual and practical tools from epidemiology and biostatistics that are necessary for the study of public health problems. Students learn epidemiologic concepts and methods, and basic statistical concepts and procedures used in public health research through applications, hands-on experience, and interpretations of statistical findings.

0101	Typhanye Dyer, Raul Cruz-Cano	Seats (Total: 80)
	MW 4:15pm - 6:15pm	SPH 1312
PLB1	Rodman Turpin, Raul Cruz-Cano	Seats (Total: 10)
	Class time/details on ELMs	ONLINE
	<i>Part of the MPH in Behavioral and Community Health program. Graduate students not admitted into this program must contact oes@umd.edu to determine registration eligibility.</i>	
PLH1	Raul Cruz-Cano, Rodman Turpin	Seats (Total: 40)
	Class time/details on ELMs	ONLINE
	<i>Must be in Public Health Policy & practice Program. For permission to enroll, contact oes@umd.edu.</i>	

SPHL603

Public Health Data Laboratory

Credits: 1

Grading Method: Regular

Corequisite: SPHL602. Restriction: Must be a graduate student within the School of Public Health.

An introduction to the statistical software necessary to implement the epidemiology and biostatistics concepts covered in the course EPIB 602, Foundations of Epidemiology and Biostatistics through hands-on exercises.

0101	Raul Cruz-Cano W 6:30pm - 7:30pm	Seats (Total: 20) SPH 0308	Lab
0102	Raul Cruz-Cano W 6:30pm - 7:30pm	Seats (Total: 20) SPH 0303	Lab
0103	Raul Cruz-Cano W 7:30pm - 8:30pm	Seats (Total: 20) SPH 0308	Lab
0104	Raul Cruz-Cano W 7:30pm - 8:30pm	Seats (Total: 20) SPH 0303	Lab
PLB1	Raul Cruz-Cano Class time/details on ELMs <i>Part of the MPH in Behavioral and Community Health program. Graduate students not admitted into this program must contact oes@umd.edu to determine registration eligibility.</i>	Seats (Total: 10) ONLINE	Lab
PLH1	Raul Cruz-Cano Class time/details on ELMs <i>Must be in Public Health Policy & Practice program. For permission to enroll, contact oes@umd.edu.</i>	Seats (Total: 40) ONLINE	Lab

SPHL612

Research Ethics

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be a graduate student in the School of Public Health. Credit only granted for: EPIB641, KNES689Y or SPHL612. Formerly: EPIB641, KNES689Y.

Overview and discussion of ethical issues that face public health researchers.

0101	Stephen Roth Meets August 26, 2019 - October 11, 2019 F 9:00am - 10:50am	Seats (Total: 25) SPH 0303
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SPHL620

Leadership, Teams, and Coalitions: Policy to Advocacy

Credits: 2 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed SPHL610. Restriction: Must be a graduate student in the School of Public Health.

Students learn team building, leadership, and advocacy skills through the development and presentation of a policy brief on an urgent public health issue. The class will use a combination of brief lectures, discussions, and planned activities on how to develop a policy briefing. Students will have an inter-professional experience during which they will discuss possible approaches to developing policies on their public health issues while practicing team building skills. Class will culminate with presentation of policy briefs through a persuasive advocacy speech.

0101	Priscilla Novak, Adele Robinson M 6:45pm - 8:45pm	Seats (Total: 75) SPH 1303
PLH1	Robert Gold, Sara Olsen Class time/details on ELMs	Seats (Total: 30) ONLINE

STAT **Statistics and Probability** **Fall 2019**

STAT100 **Elementary Statistics and Probability**

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: MS General Education: FSAR, FSMA

Prerequisite: MATH110, MATH112, MATH113, or MATH115; or permission of CMNS-Mathematics department; or must have math eligibility of STAT100 or higher and math eligibility is based on the Math Placement Exam or the successful completion of Math 003 with appropriate eligibility. Restriction: Must not have completed MATH111; or must not have completed any MATH or STAT course with a prerequisite of MATH141. Credit only granted for: STAT100, MATH107 or MATH111.

Simplest tests of statistical hypotheses; applications to before-and-after and matched pair studies. Events, probability, combinations, independence. Binomial probabilities, confidence limits. Random variables, expected values, median, variance. Tests based on ranks. Law of large numbers, normal approximation. Estimates of mean and variance.

0111	Matthew Griffin MWF 12:00pm - 12:50pm MWF 8:00am - 8:50am	Seats (Total: 27) ESJ 0202 PHY 4206 Discussion
0121	Matthew Griffin MWF 12:00pm - 12:50pm MWF 9:00am - 9:50am	Seats (Total: 29) ESJ 0202 PHY 4206 Discussion
0131	Matthew Griffin MWF 12:00pm - 12:50pm MWF 10:00am - 10:50am	Seats (Total: 29) ESJ 0202 PHY 4206 Discussion

0141	Matthew Griffin MWF 12:00pm - 12:50pm MWF 11:00am - 11:50am	Seats (Total: 29) ESJ 0202 PHY 4206	Discussion
0151	Matthew Griffin MWF 12:00pm - 12:50pm MWF 1:00pm - 1:50pm	Seats (Total: 25) ESJ 0202 PHY 4206	Discussion
0161	Matthew Griffin MWF 12:00pm - 12:50pm MWF 2:00pm - 2:50pm	Seats (Total: 27) ESJ 0202 PHY 4206	Discussion
0171	Matthew Griffin MWF 12:00pm - 12:50pm TuTh 8:00am - 9:15am	Seats (Total: 27) ESJ 0202 PHY 4206	Discussion
0181	Matthew Griffin MWF 12:00pm - 12:50pm TuTh 9:30am - 10:45am	Seats (Total: 27) ESJ 0202 PHY 4206	Discussion
0191	Matthew Griffin MWF 12:00pm - 12:50pm TuTh 11:00am - 12:15pm	Seats (Total: 29) ESJ 0202 PHY 4206	Discussion
0192	Matthew Griffin MWF 12:00pm - 12:50pm TuTh 12:30pm - 1:45pm	Seats (Total: 29) ESJ 0202 PHY 4206	Discussion
0211	Susan Mazzullo MWF 2:00pm - 2:50pm MWF 10:00am - 10:50am	Seats (Total: 27) ESJ 0202 PHY 4206	Discussion
0221	Susan Mazzullo MWF 2:00pm - 2:50pm MWF 11:00am - 11:50am	Seats (Total: 27) ESJ 0202 PHY 4206	Discussion
0231	Susan Mazzullo MWF 2:00pm - 2:50pm MWF 12:00pm - 12:50pm	Seats (Total: 27) ESJ 0202 PHY 4206	Discussion

0241	Susan Mazzullo MWF 2:00pm - 2:50pm MWF 1:00pm - 1:50pm	Seats (Total: 27) ESJ 0202 PHY 4206	Discussion
0251	Susan Mazzullo MWF 2:00pm - 2:50pm TuTh 8:00am - 9:15am	Seats (Total: 27) ESJ 0202 PHY 4206	Discussion
0261	Susan Mazzullo MWF 2:00pm - 2:50pm TuTh 9:30am - 10:45am	Seats (Total: 27) ESJ 0202 PHY 4206	Discussion
0271	Susan Mazzullo MWF 2:00pm - 2:50pm TuTh 11:00am - 12:15pm	Seats (Total: 29) ESJ 0202 PHY 4206	Discussion
0281	Susan Mazzullo MWF 2:00pm - 2:50pm TuTh 12:30pm - 1:45pm	Seats (Total: 27) ESJ 0202 PHY 4206	Discussion
0311	Matthew Griffin MWF 3:00pm - 3:50pm MWF 9:00am - 9:50am	Seats (Total: 27) ESJ 0202 PHY 4206	Discussion
0321	Matthew Griffin MWF 3:00pm - 3:50pm MWF 10:00am - 10:50am	Seats (Total: 27) ESJ 0202 PHY 4206	Discussion
0331	Matthew Griffin MWF 3:00pm - 3:50pm MWF 11:00am - 11:50am	Seats (Total: 27) ESJ 0202 PHY 4206	Discussion
0341	Matthew Griffin MWF 3:00pm - 3:50pm MWF 12:00pm - 12:50pm	Seats (Total: 27) ESJ 0202 PHY 4206	Discussion
0371	Matthew Griffin MWF 3:00pm - 3:50pm TuTh 9:30am - 10:45am	Seats (Total: 27) ESJ 0202 PHY 4206	Discussion

0381	Matthew Griffin	Seats (Total: 27)	
	MWF 3:00pm - 3:50pm	ESJ 0202	
	TuTh 11:00am - 12:15pm	PHY 4206	Discussion
FC01	Shiping Liu	Seats (Total: 45)	
	MW 3:00pm - 4:15pm	SYM 0200	
	Tu 3:00pm - 4:15pm	PHYS 4206	Discussion
	<i>Restricted to students in Freshmen Connection.</i>		
FC02	Shiping Liu	Seats (Total: 44)	
	MW 3:00pm - 4:15pm	SYM 0200	
	Th 3:00pm - 4:15pm	PHYS 4206	Discussion
	<i>Restricted to students in Freshmen Connection.</i>		

STAT386

Experiential Learning

Credits: 3-6 Grading Method: Regular,
Pass-Fail

Prerequisite: Must have learning proposal approved by the CMNS-Mathematics Department.

2801	Instructor: TBA	Seats (Total: 10)	
	Contact instructor or department for details.		
5001	Paul Smith	Seats (Total: 10)	
	Contact instructor or department for details.		

STAT400

Applied Probability and Statistics I

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH131, MATH141); or students who have taken courses with comparable content may contact the department. Credit only granted for: BMGT231, ENEE324, or STAT400. Additional information: Not acceptable toward graduate degrees in MATH/STAT/AMSC.

Random variables, standard distributions, moments, law of large numbers and central limit theorem. Sampling methods, estimation of parameters, testing of hypotheses.

0111	Susan Mazzullo	Seats (Total: 25)	
	MWF 10:00am - 10:50am	ESJ 0224	
	Tu 9:30am - 10:20am	MTH B0425	Discussion

0112	Susan Mazzullo MWF 10:00am - 10:50am Tu 9:30am - 10:20am	Seats (Total: 26) ESJ 0224 MTH 0403	Discussion
0113	Susan Mazzullo MWF 10:00am - 10:50am Tu 9:30am - 10:20am	Seats (Total: 26) ESJ 0224 MTH 0104	Discussion
0121	Susan Mazzullo MWF 10:00am - 10:50am Tu 12:30pm - 1:20pm	Seats (Total: 26) ESJ 0224 MTH 0103	Discussion
0122	Susan Mazzullo MWF 10:00am - 10:50am Tu 12:30pm - 1:20pm	Seats (Total: 26) ESJ 0224 MTH 0105	Discussion
0123	Susan Mazzullo MWF 10:00am - 10:50am Tu 12:30pm - 1:20pm	Seats (Total: 26) ESJ 0224 MTH 0104	Discussion
0131	Susan Mazzullo MWF 10:00am - 10:50am Tu 3:30pm - 4:20pm	Seats (Total: 26) ESJ 0224 MTH B0425	Discussion
0132	Susan Mazzullo MWF 10:00am - 10:50am Tu 3:30pm - 4:20pm	Seats (Total: 26) ESJ 0224 MTH 0105	Discussion
0133	Susan Mazzullo MWF 10:00am - 10:50am Tu 3:30pm - 4:20pm	Seats (Total: 26) ESJ 0224 MTH 0106	Discussion
0211	Timothy Pilachowski MWF 3:00pm - 3:50pm Th 9:30am - 10:20am	Seats (Total: 28) ARM 0126 MTH B0425	Discussion
0212	Timothy Pilachowski MWF 3:00pm - 3:50pm Th 9:30am - 10:20am	Seats (Total: 28) ARM 0126 MTH 0403	Discussion

0213	Timothy Pilachowski MWF 3:00pm - 3:50pm Th 9:30am - 10:20am	Seats (Total: 27) ARM 0126 MTH 0104	Discussion
0221	Timothy Pilachowski MWF 3:00pm - 3:50pm Th 12:30pm - 1:20pm	Seats (Total: 28) ARM 0126 MTH 0103	Discussion
0222	Timothy Pilachowski MWF 3:00pm - 3:50pm Th 12:30pm - 1:20pm	Seats (Total: 28) ARM 0126 MTH 0105	Discussion
0223	Timothy Pilachowski MWF 3:00pm - 3:50pm Th 12:30pm - 1:20pm	Seats (Total: 25) ARM 0126 MTH 0104	Discussion
0231	Timothy Pilachowski MWF 3:00pm - 3:50pm Th 3:30pm - 4:20pm	Seats (Total: 28) ARM 0126 MTH B0425	Discussion
0232	Timothy Pilachowski MWF 3:00pm - 3:50pm Th 3:30pm - 4:20pm	Seats (Total: 28) ARM 0126 MTH 0105	Discussion
0233	Timothy Pilachowski MWF 3:00pm - 3:50pm Th 3:30pm - 4:20pm	Seats (Total: 28) ARM 0126 MTH 0106	Discussion
0311	Casey Cremins TuTh 12:30pm - 1:45pm W 8:00am - 8:50am	Seats (Total: 27) ARM 0126 MTH 0201	Discussion
0312	Casey Cremins TuTh 12:30pm - 1:45pm W 8:00am - 8:50am	Seats (Total: 27) ARM 0126 MTH 0104	Discussion
0313	Casey Cremins TuTh 12:30pm - 1:45pm W 8:00am - 8:50am	Seats (Total: 27) ARM 0126 MTH 0106	Discussion

0321	Casey Cremins TuTh 12:30pm - 1:45pm W 9:00am - 9:50am	Seats (Total: 27) ARM 0126 MTH 0201	Discussion
0322	Casey Cremins TuTh 12:30pm - 1:45pm W 9:00am - 9:50am	Seats (Total: 27) ARM 0126 MTH 0104	Discussion
0323	Casey Cremins TuTh 12:30pm - 1:45pm W 9:00am - 9:50am	Seats (Total: 27) ARM 0126 MTH 0106	Discussion
0331	Casey Cremins TuTh 12:30pm - 1:45pm W 11:00am - 11:50am	Seats (Total: 27) ARM 0126 MTH 0306	Discussion
0332	Casey Cremins TuTh 12:30pm - 1:45pm W 11:00am - 11:50am	Seats (Total: 27) ARM 0126 MTH 0104	Discussion
0333	Casey Cremins TuTh 12:30pm - 1:45pm W 11:00am - 11:50am	Seats (Total: 27) ARM 0126 MTH 0401	Discussion

STAT401

Applied Probability and Statistics II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (STAT400, STAT410). Additional information: Not acceptable toward graduate degrees in MATH/STAT/AMSC.

Point estimation - unbiased and consistent estimators. Interval estimation. Minimum variance and maximum likelihood estimators. Testing of hypotheses. Regression, correlation and analysis of variance. Sampling distributions. Elements of non-parametric methods.

0101	Natalia Tchetcherina MWF 10:00am - 10:50am	Seats (Total: 28) MTH 0307
0201	Natalia Tchetcherina MWF 11:00am - 11:50am	Seats (Total: 30) MTH 0307

0301	Paul Smith MWF 12:00pm - 12:50pm	Seats (Total: 30) MTH 0106	
0501	Joan Ren TuTh 11:00am - 12:15pm	Seats (Total: 30) MTH 0303	
0701	Archana Khurana MWF 2:00pm - 2:50pm	Seats (Total: 28) MTH B0427	
0811	Archana Khurana MWF 10:00am - 10:50am Th 8:00am - 8:50am	Seats (Total: 25) IRB 0318 CHM 1224	Discussion
0812	Archana Khurana MWF 10:00am - 10:50am Th 9:00am - 9:50am	Seats (Total: 25) IRB 0318 CHM 1224	Discussion
0813	Archana Khurana MWF 10:00am - 10:50am Th 10:00am - 10:50am	Seats (Total: 25) IRB 0318 CHM 1224	Discussion

STAT410

Introduction to Probability Theory

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and 1 course with a minimum grade of C- from (MATH340, MATH241). Cross-listed with SURV410. Credit only granted for: STAT410 or SURV410.

Probability and its properties. Random variables and distribution functions in one and several dimensions. Moments. Characteristic functions. Limit theorems.

0101	Archana Khurana MWF 12:00pm - 12:50pm	Seats (Total: 30) MTH 0201	
0201	Mark Freidlin TuTh 9:30am - 10:45am	Seats (Total: 28) CSI 2107	
0301	Alex Blumenthal TuTh 11:00am - 12:15pm	Seats (Total: 30) MTH 0106	

0401	Alex Blumenthal TuTh 12:30pm - 1:45pm	Seats (Total: 30) MTH 0303
0501	Jian Lun Xu TuTh 5:00pm - 6:15pm	Seats (Total: 28) MTH 0106
0601	Brian Smithling MWF 9:00am - 9:50am	Seats (Total: 20) MTH 0304
0701	Eric Slud MW 5:00pm - 6:15pm	Seats (Total: 25) MTH 0303

STAT420 Theory and Methods of Statistics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (SURV410, STAT410). Cross-listed with SURV420. Credit only granted for: STAT420 or SURV420.

Point estimation, sufficiency, completeness, Cramer-Rao inequality, maximum likelihood. Confidence intervals for parameters of normal distribution. Hypothesis testing, most powerful tests, likelihood ratio tests. Chi-square tests, analysis of variance, regression, correlation. Nonparametric methods.

0101	Dong Dong MWF 2:00pm - 2:50pm	Seats (Total: 30) MTH 0105
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STAT426 Introduction to Data Science and Machine Learning

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: MATH240 and MATH241; or MATH340 and MATH341.

An introductory course connecting students to the most recent developments in the fields of data science and machine learning.

0101	Vincent Lyzinski MWF 1:00pm - 1:50pm	Seats (Total: 20) MTH 0306
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STAT430 Introduction to Statistical Computing with SAS

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (STAT400, STAT410).

Descriptive and inferential statistics. SAS software: numerical and graphical data summaries; merging, sorting and splitting data sets. Least squares, regression, graphics and informal diagnostics, interpreting results. Categorical data, lifetime data, time series. Applications to engineering, life science, business and social science.

0101	Hatice Sahinoglu MWF 9:00am - 9:50am	Seats (Total: 32) CHM 1224
0201	Hatice Sahinoglu MWF 10:00am - 10:50am	Seats (Total: 32) CHM 1224
0301	Susan Mazzullo MWF 12:00pm - 12:50pm	Seats (Total: 32) CHM 1224
0401	Timothy Pilachowski MWF 1:00pm - 1:50pm	Seats (Total: 32) MTH B0421
0501	Christine Nickel TuTh 5:00pm - 6:15pm	Seats (Total: 32) MTH B0421

STAT440

Sampling Theory

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (STAT401, STAT420). Credit only granted for: STAT440 or SURV440.

Simple random sampling. Sampling for proportions. Estimation of sample size. Sampling with varying probabilities. Sampling: stratified, systematic, cluster, double, sequential, incomplete.

0101	Partha Lahiri TuTh 2:00pm - 3:15pm	Seats (Total: 33) MTH 0303
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STAT464

Introduction to Biostatistics

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed one semester of calculus. Restriction: Junior standing or higher. Credit only granted for: BIOE372 or STAT464. Additional information: Not acceptable toward degrees in MATH/STAT.

Probabilistic models. Sampling. Some applications of probability in genetics. Experimental designs. Estimation of effects of treatments. Comparative experiments. Fisher-Irwin test. Wilcoxon tests for paired comparisons.

0101	Hatice Sahinoglu	Seats (Total: 30)
	MWF 12:00pm - 12:50pm	MTH 0307

STAT470**Actuarial Mathematics**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course with a minimum grade of C- from (MATH240, MATH461, MATH341); and 1 course with a minimum grade of C- from (MATH340, MATH241). Recommended: STAT400.

Major mathematical ideas involved in calculation of life insurance premiums, including compound interest and present valuation of future income streams; probability distribution and expected values derived from life tables; the interpolation of probability distributions from values estimated at one-year multiples; the 'Law of Large Numbers' describing the regular probabilistic behavior of large populations of independent individuals; and the detailed calculation of expected present values arising in insurance problems.

0101	Matthew Griffin	Seats (Total: 28)
	MWF 2:00pm - 2:50pm	HBK 0109
0201	Natalia Tchetcherina	Seats (Total: 25)
	MWF 1:00pm - 1:50pm	CHM 0128

STAT498A**Selected Topics in Statistics**

(Perm req)

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Topics of special interest to advanced undergraduate students will be offered occasionally under the general guidance of the MATH/STAT major committee. Students register for reading in statistics under this number.

Contact department for information to register for this course.

STAT600**Probability Theory I**

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: STAT410.

Probability space; distribution functions and densities; Poisson limit theorem; de Moivre-Laplace theorem; measure-theoretic definition of expectation; classification of measures on R ; convergence of random variables; Radon-Nikodym theorem; LP spaces; conditional probabilities; independence of events, sigma-algebras and random variables; Bayes' theorem; pi-systems and Dynkin systems; discrete Markov chains; random walks; gambler's ruin problem; Markov chains on a general phase space; Borel-cantelli lemmas; Kolmogorov inequality; three series theorem; laws of large numbers.

0101	Sandra Cerrai	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	EGR 1104

STAT689 Research Interactions in Statistics

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

The students participate in a vertically integrated (undergraduate, graduate and/or postdoctoral, faculty) research group. Format varies, but includes regular meetings, readings and presentations of material. See graduate program's online syllabus or contact the graduate program director for more information.

Contact department for information to register for this course.

STAT700 Mathematical Statistics I

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: STAT410; or students who have taken courses with comparable content may contact the department.

Sampling distributions including noncentral chi-squared, t , F . Exponential families, completeness. Sufficiency, factorization, likelihood ratio. Decision theory, Bayesian methods, minimax principle. Point estimation. Lehmann-Scheffe and Cramer-Rao theorems. Set estimation.

Offered fall only.

0101	Joan Ren	Seats (Total: 25)
	TuTh 9:30am - 10:45am	PHY 1402

STAT702 Survival Analysis

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: STAT410 and STAT420; or students who have taken courses with comparable content may contact the department; or permission of instructor.

Concepts/definitions of survival functions, hazard rate or hazard function, cumulative hazard functions, mean residual life, inversion formulas; Parametric models: exponential distribution, Weibull distribution; Censored/incomplete data and real data examples; right censored data, doubly censored data, interval censored data, truncated data; Nonparametric maximal likelihood estimator for the lifetime distribution under different types of censoring (e.g., Kaplan-Meier estimator), self-consistency estimators, the EM algorithm, applications of the empirical likelihood; Semiparametric models: accelerated lifetime model, proportional hazard model, the Cox model; Goodness of fit tests and diagnostic methods for model checking.

0101	Takumi Saegusa	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	PLS 1146

STAT705

Computational Statistics

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: STAT700 or STAT420. Recommended: Have some programming experience (any language). Credit only granted for: STAT705 or STAT798C. Formerly: STAT798C.

Modern methods of computational statistics and their application to both practical problems and research. S-Plus and SAS programming with emphasis on S-Plus. S-Plus objects and functions, and SAS procedures. Topics include data management and graphics, Monte Carlo and simulation, bootstrapping, numerical optimization in statistics, linear and generalized linear models, nonparametric regression, time series analysis.

0101	Benjamin Kedem	Seats (Total: 25)
	MWF 10:00am - 10:50am	MTH 1311

STAT740

Linear Statistical Models I

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: STAT700 or STAT420.

Least squares, general linear models, estimability and Gauss-Markov theorem. Simple and multiple linear regression, analysis of residuals and diagnostics, polynomial models, variable selection. Qualitative predictors, one and two way analysis of variance, multiple comparisons, analysis of covariance. Nonlinear least squares. High-level statistical computer software will be used for data analysis throughout the course.

0101	Paul Smith	Seats (Total: 20)
	MWF 2:00pm - 2:50pm	MTH 0409

STAT799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

STAT808A Selected Topics in Probability

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

Contact department for information to register for this course.

STAT818A Selected Topics in Statistics

Credits: 1-3 Grading Method: Regular, Audit

Advanced topics of current interest.

Contact department for information to register for this course.

STAT898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

STAT899 Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

SURV Survey Methodology

Fall 2019

SURV400 Fundamentals of Survey and Data Science

Credits: 3 Grading Method: Regular

Prerequisite: STAT100; or permission of BSOS-Joint Program in Survey Methodology department.

Restriction: Course open to SURV certificate students, SURV Advanced Special Students, and SURV undergraduate minors. Graduate students from other departments may enroll with permission from the department. Credit only granted for: SURV699M or SURV400. Formerly: SURV699M.

The course introduces the student to a set of principles of survey and data science that are the basis of standard practices in these fields. The course exposes the student to key terminology and concepts of collecting and analyzing data from surveys and other data sources to gain insights and to test hypotheses about the nature of human and social behavior and interaction. It will also present a framework that will allow the student to evaluate the influence of different error sources on the quality of data.

SVW1	Frauke Kreuter, Carolina Casas-Cordero	Seats (Total: 15)
	Meets September 3, 2019 - November 26, 2019	
	Tu 1:00pm - 2:00pm	ONLINE
	Contact instructor or department for details.	
	<i>Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.</i>	

SURV410

Introduction to Probability Theory

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: MATH240, MATH341, or MATH461; and (MATH241 or MATH340). Cross-listed with STAT410. Credit only granted for: STAT410 or SURV410.

Probability and its properties. Random variables and distribution functions in one and several dimensions. Moments. Characteristic functions. Limit theorems.

0101	Archana Khurana	Seats (Total: 30)
	MWF 12:00pm - 12:50pm	MTH 0201
0201	Mark Freidlin	Seats (Total: 28)
	TuTh 9:30am - 10:45am	CSI 2107
0301	Alex Blumenthal	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	MTH 0106
0401	Alex Blumenthal	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	MTH 0303
0501	Jian Lun Xu	Seats (Total: 28)
	TuTh 5:00pm - 6:15pm	MTH 0106
0601	Brian Smithling	Seats (Total: 20)
	MWF 9:00am - 9:50am	MTH 0304

0701	Eric Slud	Seats (Total: 25)
	MW 5:00pm - 6:15pm	MTH 0303

SURV615 Statistical Modeling I

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have completed a two course sequence in probability and statistics; or students who have taken courses with comparable content may contact the department. Restriction: Must be in Survey Methodology (Master's) program; or permission of instructor.

First course in a two term sequence in applied statistical methods covering topics such as regression, analysis of variance, categorical data, and survival analysis.

It runs concurrently with the University of Michigan course.

0101	Taylor Lewis	Seats (Total: 20)
	Meets September 4, 2019 - December 10, 2019	
	W 5:00pm - 7:45pm	LEF 1208

SURV617 Applications of Statistical Modeling

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: SURV615 and SURV616; or permission of instructor. Credit only granted for: SURV617, SURV746, or SURV699R. Formerly: SURV699R and SURV746.

Designed for students on both the social science and statistical tracks for the two programs in survey methodology, will provide students with exposure to applications of more advanced statistical modeling tools for both substantive and methodological investigations that are not fully covered in other MPSM or JPSM courses. Modeling techniques to be covered include multilevel modeling (with an application to methodological studies of interviewer effects), structural equation modeling (with an application of latent class models to methodological studies of measurement error), classification trees (with an application to prediction of response propensity), and alternative models for longitudinal data (with an application to panel survey data from the Health and Retirement Study). Discussions and examples of each modeling technique will be supplemented with methods for appropriately handling complex sample designs when fitting the models. The class will focus on practical applications and software rather than extensive theoretical discussions.

0101	Yajuan Si	Seats (Total: 20)
	Meets September 3, 2019 - December 9, 2019	
	F 10:00am - 12:45pm	LEF 2208

SURV621**Fundamentals of Data Collection I**

(Perm req)

Credits: 3

Grading Method: Regular,
Audit*Restriction: Permission of BSOS-Joint Program in Survey Methodology department.*

First semester of a two-semester sequence that provides a broad overview of the processes that generate data for use in social science research. Students will gain an understanding of different types of data and how they are created, as well as their relative strengths and weaknesses. A key distinction is drawn between data that are designed, primarily survey data, and those that are found, such as administrative records, remnants of online transactions, and social media content. The course combines lectures, supplemented with assigned readings, and practical exercises. In the first semester, the focus will be on the error that is inherent in data, specifically errors of representation and errors of measurement, whether the data are designed or found. The psychological origins of survey responses are examined as a way to understand the measurement error that is inherent in answers. The effects of the mode of data collection (e.g., mobile web versus telephone interview) on survey responses also are examined.

0101	Frederick Conrad, Christopher Antoun	Seats (Total: 25)
	Meets September 9, 2019 - December 9, 2019	
	M 3:30pm - 6:30pm	LEF 1208

SURV624**Privacy Law**

(Perm req)

Credits: 1

Grading Method: Regular,
Audit*Restriction: Permission of BSOS-Joint Program in Survey Methodology department.*

To acquaint the students with the origins and basic principles of privacy law mainly in Europe. Furthermore, it will contrast the European privacy foundations with the U.S. approach. At the core of this course stands the new European General Data Protection Regulation (GDPR) and its applicability to specific cases and basic principles. Moreover, the course will cover current challenges to the existing privacy paradigms by big data and big data analytics.

SVW1	Thomas Fetzer	Seats (Total: 5)
	Meets October 9, 2019 - October 30, 2019	
	W 12:00pm - 1:00pm	ONLINE
	Contact instructor or department for details.	
	<i>Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.</i>	

SURV626**Sampling**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: Permission of BSOS-Joint Program in Survey Methodology department; and must have completed an introductory graduate level statistics course covering material through OLS and logistic regression.

Practical aspects of sample design. The course will cover the main techniques used in sampling practice: simple random sampling, stratification, systematic selection, cluster sampling, multistage sampling, and probability proportional to size sampling. The course will also cover sampling frames, cost models, and sampling error (variance) estimation techniques.

SVW1	Raphael Nishimura	Seats (Total: 15)
Meets September 12, 2019 - November 14, 2019		
Th 1:00pm - 2:00pm		ONLINE
Contact instructor or department for details.		
<i>Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.</i>		

SURV627**Experimental Design for Surveys**

(Perm req)

Credits: 2

Grading Method: Regular,
Audit

Prerequisite: At least one prior course in data analysis. Recommended: Experience in the use of SAS or STATA statistical analysis software. Restriction: Permission of BSOS-Joint Program in Survey Methodology department.

A key tool of methodological research is the split-ballot experiment, in which randomly selected subgroups of a sample receive different questions, different response formats, or different modes of data collection. In theory, such experiments can combine the clarity of experimental designs with the inferential power of representative samples. All too often, though, such experiments use flawed designs that leave serious doubts about the meaning or generalization of the findings. The purpose of this course is to consider the issues involved in the design and analysis of data from experiments embedded in surveys. It covers the purposes of experiments in surveys, examines several classic survey experiments in detail, and takes a close look at some of the pitfalls and issues in the design of such studies. These pitfalls include problem, such as the confounding of the experimental variables, that jeopardize the comparability of the experimental groups, problems, such as non response, that cast doubts on the generality of the results, and problems in determining the reliability of the results. The course will also consider some of the design decisions that almost always arise in planning experiments; issues such as identifying the appropriate error term for significance tests and including necessary comparison groups.

SVW1	Ashley Amaya	Seats (Total: 15)
	Meets September 3, 2019 - October 23, 2019	
	Tu 8:00am - 9:00am	ONLINE
	Contact instructor or department for details.	
	<i>Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.</i>	

SURV632

Cognition, Communication and Survey Measurement

Credits: 3 Grading Method: Regular,
Audit

Major sources of survey error-such as reporting errors and nonresponse bias-from the perspective of social and cognitive psychology and related disciplines. Topics: psychology of memory and its bearing on classical survey issues (e.g., underreporting and telescoping); models of language use and their implications for the interpretation and misinterpretation of survey questions; and studies of attitudes, attitude change, and their possible application to increasing response rates and improving the measurement of opinions. Theories and findings from the social and behavioral sciences will be explored.

Restricted to SURV majors only.

0101	Frederick Conrad	Seats (Total: 15)
	Meets September 4, 2019 - December 10, 2019	
	W 9:00am - 11:45am	LEF 1208

SURV650

Economic Measurement

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Must have completed a course in intermediate microeconomics. Credit only granted for: SURV650 or SURV699L. Formerly: SURV699L.

An introduction to the field of economic measurement. Sound economic data are of critical importance to policymakers, the business community, and others. Emphasis is placed on the economic concepts that underlie key economic statistics and the translation of those concepts into operational measures. Topics addressed include business survey sampling; the creation of business survey sampling frames; the collection of data from businesses; employment and earnings statistics; price statistics; output and productivity measures; the national accounts; and the statistical uses of administrative data. Lectures and course readings assume prior exposure to the tools of economic analysis.

SV01	Katharine Abraham	Seats (Total: 24)
	Meets August 26, 2019 - December 6, 2019	
	Tu 9:00am - 11:40am	Location: TBA
	<i>Meets at the Census Bureau, T10 training room.</i>	

SURV673 Introduction to Python and SQL

(Perm req)

Credits: 1 Grading Method: Regular,
Audit

Recommended: Background knowledge in programming in Python and SQL structures.

Basics of Python and SQL for data analysis. Students will explore real publicly-available datasets, using the data analysis tools in Python to create summaries and generate visualizations. Students will learn the basics of database management and organization, as well as learn how to code in SQL and work with PostgreSQL databases. By the end of the class, students should understand how to read in data from CSV files or from the internet and become comfortable using either SQL or Python to aggregate, summarize, describe, and visualize these datasets.

SVW1	Brian Kim	Seats (Total: 15)
	Meets September 25, 2019 - October 16, 2019	
	W 1:00pm - 2:00pm	ONLINE
	Contact instructor or department for details.	
	<i>Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.</i>	

SURV699 Special Topics in Survey Methodology; Reading in Survey Methodology

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on specialized advanced topics in survey methodology.

0101	Frederick Conrad	Seats (Total: 10)
	Contact instructor or department for details.	
0301	Stanley Presser	Seats (Total: 10)
	Contact instructor or department for details.	

SURV699T Special Topics in Survey Methodology; Practical Tools II (for Weighting)

Credits: 1 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on specialized advanced topics in survey methodology.

SVW1	Jill Dever	Seats (Total: 15)
Meets September 30, 2019 - October 21, 2019		
M 12:00pm - 1:00pm		ONLINE
Contact instructor or department for details.		
<i>Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.</i>		

SURV699U Special Topics in Survey Methodology; Machine Learning for Social Science

Credits: 3 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on specialized advanced topics in survey methodology.

Prerequisite: Students should work through one or more R tutorials prior or during the first weeks of class due to the short introduction to R presented in the class. Some resources can be found at the following: <https://www.rstudio.com/online-learning/#R>, <https://cran.r-project.org/manuals.html>, or <http://www.statmethods.net>. Provides an introduction to supervised statistical learning techniques such as decision trees, random forests and boosting and discusses their potential application in the social sciences. These methods focus on predicting an outcome Y based on some data-driven function $f(X)$ and therefore facilitate new research perspectives in comparison with traditional regression models, which primarily focus on causation. Predictive methods also provide a valuable extension to the empirical social scientists' toolkit as new data sources become more prominent. In addition to introducing supervised learning methods, the course will include practical sessions to exemplify how to tune and evaluate prediction models using the statistical programming language R.

0101	Christoph Kern	Seats (Total: 30)
	Meets September 3, 2019 - December 10, 2019	
	Tu 2:00pm - 4:45pm	LEF 1208

SURV699W Special Topics in Survey Methodology; Synthetic Population

Credits: 1-4 Grading Method: Regular, Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on specialized advanced topics in survey methodology.

Prerequisite: Mathematical statistics course at the Master's level (e.g., UMD STAT/SURV 420 or equivalent.) If you are unsure about your qualifications for the course, please contact us.

0101	Partha Lahiri	Seats (Total: 10)
	Meets September 3, 2019 - December 3, 2019	
	Tu 10:00am - 12:30pm	LEF 1208

SURV699Z Special Topics in Survey Methodology; Applied Data Analytics

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Credit according to time scheduled and organization of the course. Organized as a lecture series on specialized advanced topics in survey methodology.

Innovative forms of data never seen before, combined with traditional survey and administrative data, provide a rich resource for data-driven decisions in public policy and the public sector. The program's design offers hands-on training in the context of real challenges facing the sector, by providing direct collaboration among government agencies and students in the program. Skills learned as part of the project work are SQL, Python, Record Linkage, Database Management, use of APIs, Web Scraping, Basic Machine Learning, Text Analysis, Analysis of Network and Geospatial data, Inference, Privacy and Ethics.

0201	Brian Kim, Frauke Kreuter	Seats (Total: 10)
	Meets September 18, 2019 - November 6, 2019	
	WThF 9:00am - 6:00pm	LEF 1218
	<i>Class will meet on the following dates: 09/18 through 9/20; 10/16 through 10/18; and 11/06.</i>	

SURV703 Computer-Based Content Analysis I

(Perm req)

Credits: 1

Grading Method: Regular,
Audit

Prerequisite: Background knowledge in programming in Python and SQL structures. Recommended: SURV736.

Investigate the foundations of Natural Language Processing (NLP) as tool for analyzing natural language texts in the social sciences, thus providing an alternative to traditional ways of data generation through surveys. The course introduces general use cases for NLP, provides a guide to standard operations on text as well as their implementation in the Python-based Natural Language Toolkit (NLTK) and introduces the text mining functionalities of the WEKA Machine Learning workbench. The theory part of the course worth one credit can be supplemented by an optional project part worth another credit point.

SVW1	Christoph Theil	Seats (Total: 15)
	Meets November 11, 2019 - December 2, 2019	
	M 12:00pm - 1:00pm	ONLINE
	Contact instructor or department for details.	
	<i>Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.</i>	

SURV720

Total Survey Error and Data Quality I

(Perm req)

Credits: 2 Grading Method: Regular,
Audit

Prerequisite: SURV625. Restriction: Permission of instructor. Credit only granted for: (SURV720 and SURV721) or SURV723. Formerly: SURV723.

Total error structure of sample survey data, reviewing current research findings on the magnitudes of different error sources, design features that affect their magnitudes, and interrelationships among the errors. Coverage, nonresponse, sampling, measurement, and postsurvey processing errors. For each error source reviewed, social science theories about its causes and statistical models estimating the error source are described. Empirical studies from the survey methodological literature are reviewed to illustrate the relative magnitudes of error in different designs. Emphasis on aspects of the survey design necessary to estimate different error sources. Relationships to show how attempts to control one error source may increase another source. Attempts to model total survey error will be presented.

It runs concurrently with the University of Michigan course.

0101	Christopher Antoun	Seats (Total: 20)
	Meets September 5, 2019 - December 6, 2019	
	Th 10:20am - 12:15pm	LEF 1208

SURV725

Item Nonresponse and Imputation

(Perm req)

Credits: 1 Grading Method: Regular,
Audit

Prerequisite: Be comfortable with generalized linear models and basic probability theory through coursework or work experience; and familiarity with the statistical software R. Restriction: Permission of BSOS-Joint Program in Survey Methodology department.

Missing data are a common problem which can lead to biased results if the missingness is not taken into account at the analysis stage. Imputation is often suggested as a strategy to deal with item nonresponse allowing the analyst to use standard complete data methods after the imputation. However, several misconceptions about the aims and goals of imputation make some users skeptical about the approach. In this course we will illustrate why thinking about the missing data is important and clarify which goals a useful imputation method should try to achieve.

SVW1	Joerg Drechsler	Seats (Total: 8)
	Meets November 6, 2019 - November 27, 2019	
	W 2:00pm - 3:00pm	ONLINE
	Contact instructor or department for details.	
	<i>Students must have access to a standalone web camera and a headset to participate in the weekly online meetings.</i>	

SURV727 Fundamentals of Computing and Data Display

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be in a major within the BSOS-Joint Program in Survey Methodology department; or permission of BSOS-Joint Program in Survey Methodology department. Additional information: Students without any R knowledge are encouraged to work through one or more R web tutorials prior or during the first weeks of the course.

The first part of this course provides an introduction to web scraping and APIs for gathering data from the web and then discusses how to store and manage (big) data from diverse sources efficiently. The second part of the course demonstrates techniques for exploring and finding patterns in (non-standard) data, with a focus on data visualization. The course focuses on R as the primary computing environment, with excursus into SQL and Big Data processing tools.

The first part of this course provides an introduction to web scraping and APIs for gathering data from the web and then discusses how to store and manage (big) data from diverse sources efficiently. The second part of the course demonstrates techniques for exploring and finding patterns in (non-standard) data, with a focus on data visualization. The course focuses on R as the primary computing environment, with excursus into SQL and Big Data processing tools.

0101	Christoph Kern	Seats (Total: 20)
	Meets September 9, 2019 - December 9, 2019	
	M 12:30pm - 3:30pm	LEF 2208

SURV740 Fundamentals of Inference

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: SURV410 and SURV420; or (SURV615 and SURV616); or permission of Instructor required. Restriction: Must be in a major within the BSOS-Joint Program in Survey Methodology department; or permission of BSOS-Joint Program in Survey Methodology department.

Focuses on the fundamentals of statistical inference in the finite population setting. Overview and review fundamental ideas of making inferences about populations. Basic principles of probability sampling; focus on differences between making predictions and making inferences; explore the differences between randomized study designs and observational studies; consider model-based vs. design-based analytic approaches; review techniques designed to improve efficiency using auxiliary information; and consider non-probability sampling and related inferential techniques.

Focuses on the fundamentals of statistical inference in the finite population setting. Overview and review fundamental ideas of making inferences about populations. Basic principles of probability sampling; focus on differences between making predictions and making inferences; explore the differences between randomized study designs and observational studies; consider model-based vs. design-based analytic approaches; review techniques designed to improve efficiency using auxiliary information; and consider non-probability sampling and related inferential techniques.

0101	Michael Elliott, Yan Li	Seats (Total: 20)
	Meets September 6, 2019 - December 9, 2019	
	F 1:00pm - 4:00pm	LEF 1208

SURV829 Doctoral Research Seminar in Survey Methodology

Credits: 3-6 Grading Method: Regular

An advanced research seminar for students preparing to do research or take doctoral comprehensive examinations.

0101	Brady West, Katharine Abraham	Seats (Total: 10)
	Meets September 4, 2019 - December 10, 2019	
	W 2:00pm - 4:30pm	LEF 1208

SURV898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

SURV899 Doctoral Dissertation Research

(Perm req) Credits: 6 Grading Method: Regular, Sat-Fail

Contact department for information to register for this course.

TDPS201

Introduction to Technical Production

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in a major within the ARHU-Dance department; or must be in a major within the ARHU-Theatre department. Credit only granted for: DANC210 and THET114 or TDPS201. Formerly: DANC210 and THET114.

Students are provided with an overview of topics related to the technical production of theatre and dance including: scenic, prop and costume construction, lighting, sound and video execution and management structures.

Students must pay a \$25.00 lab fee.

5501	Michael Driggers	Seats (Total: 20)	
	MW 4:00pm - 4:50pm	PAC 1809	
	F 3:30pm - 5:30pm	PAC 1702	Lab

TDPS258C

Special Topics in Introductory Performing Arts; Cultural Institutions in the United States

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Designed for performing arts students. Offers instruction at the introductory level in various aspects of performance such as Voice for the Performing Arts, Movement for the Performing Arts, Acting for the Performing Arts, Partner Dance and a myriad of specific aspects within these genres.

Cross-listed with ARHU240. Credit granted for TDPS258C or ARHU240.

0101	Fraser Stevens	Seats (Total: 25)	
	MWF 1:00pm - 1:50pm	ARC 1105	

TDPS362

Alexander Technique

(Perm req)

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: THET222, THET116, THET223, and TDPS201; or (DANC218 and DANC219). And permission of ARHU-School of Theatre, Dance & Performance Studies department. Credit only granted for: THET399J, THET362 or TDPS362. Formerly: THET399J and THET362.

Based on the F.M. Alexander Technique, students will learn to recognize habit patterns that interfere with how they function and express themselves so that they can make conscious choices as a performing artist.

Students must pay a \$25 lab fee.

5501	Leslie Felbain	Seats (Total: 20)
	TuTh 9:30am - 11:20am	PAC 3736

TDPS4580 Special Topics in Advanced Performing Arts; Voice, Text, Dance Making

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Designed for performing arts students. Offers instruction at an advanced level in various aspects of performance such as Voice for the Performing Arts, Movement for the Performing Arts, Acting for the Performing Arts, Partner Dance and a myriad of specific aspects within these genres.

Students must pay a \$25 lab fee. Open to all UMD students.

5501	Alvin Mayes	Seats (Total: 15)
	TuTh 3:30pm - 4:45pm	PAC 1611

TDPS469 Advanced Practicum in Stage Management

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

A graded course in stage management for theatre and/or dance productions. A hands-on laboratory experience.

0101	Jennifer Schwartz	Seats (Total: 8)
	Contact instructor or department for details.	

TDPS479 Production Practicum

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

A graded course in a specified practical aspect of mounting a theatre or dance production. It is a hands-on, purely laboratory experience.

1001	Bobby Hunter	Seats (Total: 25)
	Contact instructor or department for details.	

1002	Bobby Hunter	Seats (Total: 15)
	Contact instructor or department for details.	
1003	Bobby Hunter	Seats (Total: 15)
	Contact instructor or department for details.	
1004	Bobby Hunter	Seats (Total: 15)
	Contact instructor or department for details.	
1005	Bobby Hunter	Seats (Total: 15)
	Contact instructor or department for details.	
1006	Bobby Hunter	Seats (Total: 15)
	Contact instructor or department for details.	
1007	Bobby Hunter	Seats (Total: 15)
	Contact instructor or department for details.	
2001	Bobby Hunter	Seats (Total: 15)
	Contact instructor or department for details.	
2002	Bobby Hunter	Seats (Total: 15)
	Contact instructor or department for details.	
2003	Bobby Hunter	Seats (Total: 15)
	Contact instructor or department for details.	
2004	Bobby Hunter	Seats (Total: 15)
	Contact instructor or department for details.	
2005	Bobby Hunter	Seats (Total: 15)
	Contact instructor or department for details.	
2006	Bobby Hunter	Seats (Total: 15)
	Contact instructor or department for details.	

THET

Theatre

Fall 2019

THET110

Introduction to the Theatre

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

CORE: HA

General Education: DSHU

In the age of pop music and blockbuster films, of memes and viral videos, we often forget that theatre was one of the original forms of popular entertainment. We will focus on theatre practitioners including actors, directors, designers and backstage personnel to understand how theatre is produced. We will also consider popular entertainment in Europe and America, with a particular focus on musical theatre and Broadway to explore how theatre communicates, resonates, and remains relevant to all audiences.

0101	Caitlin Marshall MW 10:00am - 10:50am W 2:00pm - 2:50pm	Seats (Total: 24) ATL 2324 ATL 2316	Discussion
0102	Caitlin Marshall MW 10:00am - 10:50am W 3:00pm - 3:50pm	Seats (Total: 24) ATL 2324 ATL 2428	Discussion
0103	Caitlin Marshall MW 10:00am - 10:50am W 11:00am - 11:50am	Seats (Total: 24) ATL 2324 ATL 2416	Discussion
0104	Caitlin Marshall MW 10:00am - 10:50am W 12:00pm - 12:50pm	Seats (Total: 24) ATL 2324 ATL 2316	Discussion
0105	Caitlin Marshall MW 10:00am - 10:50am W 1:00pm - 1:50pm	Seats (Total: 24) ATL 2324 ATL 2416	Discussion
0201	Caitlin Marshall MW 11:00am - 11:50am W 2:00pm - 2:50pm	Seats (Total: 24) ATL 2324 ATL 2416	Discussion
0202	Caitlin Marshall MW 11:00am - 11:50am W 3:00pm - 3:50pm	Seats (Total: 24) ATL 2324 ATL 2316	Discussion
0203	Caitlin Marshall MW 11:00am - 11:50am W 1:00pm - 1:50pm	Seats (Total: 24) ATL 2324 ATL 0201	Discussion
0204	Caitlin Marshall MW 11:00am - 11:50am W 12:00pm - 12:50pm	Seats (Total: 24) ATL 2324 JMP 1109	Discussion

0205	Caitlin Marshall	Seats (Total: 24)	
	MW 11:00am - 11:50am	ATL 2324	
	W 1:00pm - 1:50pm	KNI 1103	Discussion
FC01	Robert Jansen	Seats (Total: 22)	
	TuTh 6:00pm - 7:15pm	JMZ 0125	
	<i>Restricted to students in Freshmen Connection.</i>		

THET116

(Perm req)

Fundamentals of Theatrical Design

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

Examines theatre as an environmental art that is realized through collaboration between set, costume, and lighting designers.

Students must pay a \$25.00 lab fee.

5501	Jeremy Bennett, Grace Guarniere	Seats (Total: 20)	
	TuTh 3:00pm - 4:50pm	PAC 2733	

THET222

(Perm req)

Foundations of Acting and Performance

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

Students will become familiar with the tools and process of acting through the discipline of acting exercises, analyzing character and performing. Students will research various theatre artists that have contributed to the acting process. Through monologue and scene work students will learn listening skills, communicative, collaborative and embodiment skills and will learn how to use the self in the imaginative process and research. And, most importantly, students will learn creative process through practice.

Students must pay a \$25.00 lab fee.

5501	Jennifer Newsham	Seats (Total: 14)	
	TuTh 2:00pm - 3:50pm	PAC 3730	Lab
5502	Scot Reese	Seats (Total: 14)	
	TuTh 10:00am - 11:50am	PAC 3730	Lab

THET223**Text and Context in Western Theatre**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

Introduction to the analysis and critique of the play script. Students will have the opportunity to read, analyze, and interpret western dramatic literature from a range of periods and styles. Texts are analyzed from a variety of theatrical analytical perspectives, with an eye towards choices theatre artists must make in the creation of a theatrical production.

0101	Jenna Gerdson	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	PAC 1809
0102	Allison Hedges	Seats (Total: 20)
	MW 11:00am - 12:15pm	PAC 1809

THET269B**Special Topics in Study Abroad II; The Meaning of Style**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

THET269T**Special Topics in Study Abroad II; 20th Century and Contemporary Spanish Theatre**

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

THET274**Introduction to Stage Management**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: THET114 or TDPS201; and permission of ARHU-School of Theatre, Dance & Performance Studies department.

Familiarization with the techniques and skills required of a Stage Manager in a theatrical production, including organization, production meetings, rehearsals, tech and running a show. The outcome at the conclusion of the course is the ability to function as an Assistant Stage Manager in a supervised situation.

Students must pay a \$25.00 lab fee.

5501	Jennifer Schwartz	Seats (Total: 12)
	TuTh 11:00am - 12:15pm	PAC 1815

THET284 Stage Costume Construction I

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

Study and practical experience in garment construction and related costume crafts as used in theatre costume design. Flat pattern development, corset construction, theatrical sewing techniques and organization of the costume construction process.

Students must pay a \$25.00 lab fee.

5501	Susan Chiang	Seats (Total: 12)
	MW 9:00am - 11:50am	PAC 3749 Lab

THET285 The Art of Communication and Presentation

Credits: 3 Grading Method: Regular, General Education: FSOC
Pass-Fail, Audit

Credit only granted for: COMM107, COMM200, INAG110, JOUR130, or THET285.

An introduction to the fundamental practice and theory of public speaking and oral communication using theatrical techniques of both performance and the craft of storytelling.

0101	Tara Demmy	Seats (Total: 25)
	MW 10:00am - 11:50am	PAC 3732
0102	Leslie Gray	Seats (Total: 25)
	TuTh 12:00pm - 1:50pm	PAC 3732
0103	Kelley Holley	Seats (Total: 25)
	MW 12:00pm - 1:50pm	PAC 3736
FC02	Jennifer Ring	Seats (Total: 24)
	MW 4:30pm - 5:45pm	BPS 1236
<i>Restricted to students in Freshmen Connection.</i>		

FC03	Emily Warheit TuTh 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 24) JMZ 2123
FC04	Drew Barker TuTh 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 24) JMZ 1215
FC06	Jennifer Ring MW 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 24) JMZ 0122

THET286

(Perm req)

Experiential Learning I

Credits: 1-3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: THET222, THET223, and THET116. And THET114; or TDPS201. And permission of ARHU-School of Theatre, Dance & Performance Studies department.

Introductory internship in theatre. Constructed to help students in their sophomore year gain practical experience in a supportive work environment in the theatre. Student must research and propose internship to a Faculty Advisor and Internship Venue.

0101	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0210	Franklin Hildy Contact instructor or department for details.	Seats (Total: 5)
0301	Leigh Smiley Contact instructor or department for details. Contact instructor or department for details.	Seats (Total: 5)
0401	Scot Reese Contact instructor or department for details. Contact instructor or department for details.	Seats (Total: 5)
0501	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0601	Instructor: TBA Contact instructor or department for details. Contact instructor or department for details.	Seats (Total: 5)

0901	Mitchell Hebert	Seats (Total: 5)
	Contact instructor or department for details.	
	Contact instructor or department for details.	
1301	Brian MacDevitt	Seats (Total: 5)
	Contact instructor or department for details.	
1501	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	
1601	Daniel Conway	Seats (Total: 5)
	Contact instructor or department for details.	
	Contact instructor or department for details.	
1701	Helen Huang	Seats (Total: 5)
	Contact instructor or department for details.	
	Contact instructor or department for details.	
1801	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	
2001	Faedra Carpenter	Seats (Total: 5)
	Contact instructor or department for details.	
	Contact instructor or department for details.	
2003	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	
	Contact instructor or department for details.	
2005	Laurie Frederik	Seats (Total: 5)
	Contact instructor or department for details.	
2007	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	

THET293

Black Theatre and Performance I

Credits: 3

Grading Method: Regular

CORE: HA, D

General Education: DSHU,
DSSP, DVUP

Thematic and historical survey of African-American drama from the late nineteenth century to the 1960s. Emphasis on sociopolitical context, thematic thrust, issues, styles, the aesthetic reflected in the work, impact on African-American and general theatre audiences.

0101	Jordan Ealey	Seats (Total: 25)
	MW 2:00pm - 3:15pm	SQH 1119

THET310

Voice for the Actor I

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: THET116, THET222, THET223, and TDPS201; and must Interview; and permission of ARHU-School of Theatre, Dance & Performance Studies department. Restriction: Sophomore standing or higher.

Freeing the natural voice. In-depth experience of connection of actor's voice to thought, impulse and emotion. Tools for releasing tension, increasing resonance and range, and refining articulation will be explored.

Students must pay a \$25.00 lab fee.

5501	Lisa Nathans	Seats (Total: 15)
	MW 10:00am - 11:50am	PAC 3736 Lab

THET324

Character Development

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in THET310 and THET362; or permission of Instructor. And must audition; and permission of ARHU-School of Theatre, Dance & Performance Studies department. Restriction: Junior standing or higher.

European-based physical approach to acting. Primary focus on character development, may include creating original characters and learning how to bring to life an already scripted character. Techniques to explore the soul and psychology of characters and their physical qualities, voice, rhythm and movement.

Students must pay a \$25 lab fee.

5501	Leslie Felbain	Seats (Total: 12)
	TuTh 1:30pm - 3:20pm	PAC 3736

THET325

Actor's Process I

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have completed or be concurrently enrolled in THET310; or permission of Instructor. And must audition; and permission of ARHU-School of Theatre, Dance & Performance Studies department.

Focus on use of self in creating character. Tools employed include decision-making and use of imagery, personalization, objectives, adjectives, and verbs.

5501	Mitchell Hebert	Seats (Total: 12)
	MW 10:00am - 11:50am	PAC 3730

THET328M Special Topics in Intermediate Theatre and Performance; Introduction to Musical Theatre

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topics covered include: Intercultural Theatre, Performance Art, Puppetry, Solo Performance, or Theatrical Design.

Students must pay a \$25 lab fee.

5501	Lisa Nathans	Seats (Total: 12)
	Tu 9:00am - 11:50am	PAC 2740

THET330 Play Directing I

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: THET222, THET223, and THET116. And THET114; or TDPS201. And permission of ARHU-School of Theatre, Dance & Performance Studies department. Restriction: Junior standing or higher.

A lecture-laboratory course dealing with the techniques of coordinating, designing and guiding the production of a script through to performance. Study and practice in stage composition, movement, pacing, script and character analysis, and rehearsal routines. Emphasis on methods of communicating a script to an audience.

5501	Scot Reese	Seats (Total: 12)
	MW 10:00am - 11:50am	PAC 2740 Lab

THET340 Playwriting I

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: THET222, THET223, THET116, and TDPS201. Restriction: Permission of ARHU-School of Theatre, Dance & Performance Studies department. Credit only granted for: THET340 or THET399P. Formerly: THET399P.

Will introduce students to the art of playwriting through exploratory writing exercises, the reading of successful plays, the development of new short scripts, how to make theatrical choices, and how to use the six elements of storytelling.

Students must pay a \$25.00 lab fee.

5501	Jennifer Newsham	Seats (Total: 12)
	MW 2:00pm - 3:50pm	PAC 1815

THET363 The Business of the Business

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: THET116, THET222, THET223, and TDPS201; and permission of ARHU-School of Theatre, Dance & Performance Studies department. Credit only granted for: THET399B or THET499E or THET363. Formerly: THET399B, THET499E.

An in depth study of the business of working in the theatre. Explores early career opportunities and entry-level positions in the entertainment industry. Analyzes publicity, management, union, casting, and agency practices; how they apply to you and your career in the non-profit and commercial theatre.

0101	Mitchell Hebert	Seats (Total: 15)
	F 9:00am - 11:50am	PAC 1815

THET369L Special Topics in Study Abroad III; 20th Century and Contemporary Latin American Theatre

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

THET371 Scenic Design I

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: THET222, THET223, and THET116; and (THET114; or TDPS201). Or permission of ARHU-School of Theatre, Dance & Performance Studies department.

A study of design theory and style. Methods and techniques of coordination of all elements of scenic design for theatre.

Students must pay a \$25.00 lab fee.

5501	Mikhail Kachman	Seats (Total: 8)
	W 2:00pm - 4:50pm	PAC 2733

THET385**Media Design**

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: THET222, THET223, THET116, and TDPS201; and permission of ARHU-School of Theatre, Dance & Performance Studies department. Credit only granted for: THET399D or THET385. Formerly: THET399D.

Focuses on learning the grammar and conceptual thinking behind multimedia design for live performance. Students will learn how our new multimedia tools can enhance the sense of liveness as well as explore the different ways in which technology can be implemented into preproduction thinking, rehearsal experimenting, and ultimately, effective use in performance.

Students must pay a \$25 lab fee.

5501	Jared Mezzocchi	Seats (Total: 12)
	TuTh 10:30am - 12:15pm	PAC 2727

THET386**Experiential Learning**

(Perm req)

Credits: 3-6

Grading Method: Regular,
Pass-Fail

Restriction: Junior standing or higher; and permission of ARHU-School of Theatre, Dance & Performance Studies department.

0101	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	
0201	Franklin Hildy	Seats (Total: 5)
	Contact instructor or department for details.	
0301	Leigh Smiley	Seats (Total: 5)
	Contact instructor or department for details.	
0401	Scot Reese	Seats (Total: 5)
	Contact instructor or department for details.	
0501	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	

0601	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
0801	Leslie Felbain Contact instructor or department for details.	Seats (Total: 5)
0901	Mitchell Hebert Contact instructor or department for details.	Seats (Total: 5)
1101	Mikhail Kachman Contact instructor or department for details.	Seats (Total: 5)
1301	Brian MacDevitt Contact instructor or department for details.	Seats (Total: 5)
1501	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
1601	Daniel Conway Contact instructor or department for details.	Seats (Total: 5)
1701	Helen Huang Contact instructor or department for details.	Seats (Total: 5)
1801	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
2001	Faedra Carpenter Contact instructor or department for details.	Seats (Total: 5)
2003	Jennifer Schwartz Contact instructor or department for details.	Seats (Total: 5)
2005	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
2007	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)
2009	Instructor: TBA Contact instructor or department for details.	Seats (Total: 5)

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit, D

Prerequisite: Permission of ARHU-School of Theatre, Dance & Performance Studies department.

The history of Western theatre from its origins in classical antiquity through the mid-seventeenth century with emphasis on plays and playwrights, architecture and decor, acting and costuming, and significant personalities. Includes explorations of interrelationships between Western theatre and the theatre of other cultures.

0101	Faedra Carpenter	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	PAC 1809

THET399**Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular, Pass-Fail, Audit

An independent study in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate in term papers, scenic; lighting, or costume designs; or a stage production.

0201	Franklin Hildy	Seats (Total: 5)
	Contact instructor or department for details.	
0301	Leigh Smiley	Seats (Total: 5)
	Contact instructor or department for details.	
0401	Scot Reese	Seats (Total: 5)
	Contact instructor or department for details.	
0501	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	
0601	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	
0701	Jennifer Newsham	Seats (Total: 5)
	Contact instructor or department for details.	
0801	Leslie Felbain	Seats (Total: 5)
	Contact instructor or department for details.	
0901	Mitchell Hebert	Seats (Total: 5)
	Contact instructor or department for details.	

1101	Mikhail Kachman	Seats (Total: 5)
	Contact instructor or department for details.	
1301	Brian MacDevitt	Seats (Total: 5)
	Contact instructor or department for details.	
1401	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	
1501	Lisa Nathans	Seats (Total: 5)
	Contact instructor or department for details.	
1601	Daniel Conway	Seats (Total: 5)
	Contact instructor or department for details.	
1701	Helen Huang	Seats (Total: 5)
	Contact instructor or department for details.	
1801	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	
2001	Faedra Carpenter	Seats (Total: 5)
	Contact instructor or department for details.	
2003	Jennifer Schwartz	Seats (Total: 5)
	Contact instructor or department for details.	
2005	Laurie Frederik	Seats (Total: 5)
	Contact instructor or department for details.	
2007	Jared Mezzocchi	Seats (Total: 5)
	Contact instructor or department for details.	
2009	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	

THET399H

Independent Study; London Stage

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

An independent study in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate in term papers, scenic; lighting, or costume designs; or a stage production.

Contact department for information to register for this course.

THET399W **Independent Study; The London Stage**

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

An independent study in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate in term papers, scenic; lighting, or costume designs; or a stage production.

Contact department for information to register for this course.

THET399X **Independent Study; The London Stage**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An independent study in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate in term papers, scenic; lighting, or costume designs; or a stage production.

Contact department for information to register for this course.

THET408I **Seminar: Theory and Performance Studies; True Storytelling & Narratives of Cultural Identity**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Studies in theatre theory and performance studies from classical antiquity to the present.

Cross-listed with AMST429M and ANTH429M. Credit granted for THET408I, ANTH429M or AMST429M.

0101	Laurie Frederik	Seats (Total: 10)
	M 3:00pm - 5:30pm	PAC 2740

THET408U **Seminar: Theory and Performance Studies; Theatre About Show Business**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Studies in theatre theory and performance studies from classical antiquity to the present.

0101	James Harding	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	PAC 1815

THET408X **Seminar: Theory and Performance Studies; Performing Latin(x) America**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Studies in theatre theory and performance studies from classical antiquity to the present.

0102	Melissa Blanco Borelli	Seats (Total: 15)
	MW 11:30am - 12:45pm	PAC 1815

THET411**Voice for the Actor II**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: THET324 or THET325; and must audition; and permission of ARHU-School of Theatre, Dance & Performance Studies department. Restriction: Junior standing or higher. Credit only granted for: THET311, THET411, or THET499L. Formerly: THET311.

Learn the International Phonetic Alphabet (IPA) and apply to exploration of sound and language. Designed to increase voice and speech awareness, and create a base knowledge from which to approach any accent or dialect.

Students must pay a \$25 lab fee.

5501	Lisa Nathans	Seats (Total: 12)
	MW 1:00pm - 2:50pm	PAC 2740

THET424**Movement II: Advanced Studies in Movement and Mask Theatre**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: THET325 or THET324; and must audition; and permission of ARHU-School of Theatre, Dance & Performance Studies department. Restriction: Junior standing or higher.

A deeper exploration of how to use the actor's instrument for dramatic expression. Continuing work in the F.M. Alexander Technique and foundational exercise to help actors learn what they need to prepare for rehearsal and performance. Other techniques may include theatrical styles, physical character, dramatic use and play with space and rhythm and masks.

5501	Leslie Felbain	Seats (Total: 12)
	TuTh 3:30pm - 5:00pm	PAC 3736

THET428L**Special Topics in Advanced Theatre and Performance; Advanced Techniques Lighting Design: Programming**

(Perm req)

Credits: 3 Grading Method: Regular

This course is offered as part of the School of Theatre, Dance, and Performance Studies' Artist in Residence program. Topics covered may include: Intercultural Theatre; Performance Art; Puppetry; Solo Performance; or Theatrical Design.

Required pre-requisite THET377. Students must pay a \$25 lab fee.

5501	Jacob Hughes	Seats (Total: 8)
	TuTh 3:00pm - 4:50pm	PAC 3731

THET4280 Special Topics in Advanced Theatre and Performance; Photoshop

Credits: 3 Grading Method: Regular

This course is offered as part of the School of Theatre, Dance, and Performance Studies' Artist in Residence program. Topics covered may include: Intercultural Theatre; Performance Art; Puppetry; Solo Performance; or Theatrical Design.

5501	Andrew Cohen	Seats (Total: 3)
	MW 9:00am - 10:50am	PAC 2727 Lab
	<i>Jointly offered with THET669P.</i>	

THET429 Actor's Studio

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail

Participation in dramatic roles executed under faculty supervision in the department's productions. Eligible students must make commitments and plan performances with course instructor during pre-registration.

Contact department for information to register for this course.

THET473 Rendering for the Theatre II

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: THET373; or permission of instructor.

Continued study in rendering techniques and graphic skills for theatrical design presentation. Emphasis on style, technique and use of different artistic media.

Students must pay a \$25 lab fee.

0101	Helen Huang	Seats (Total: 8)
	TuTh 1:30pm - 2:50pm	PAC 2733

THET477**Design Studio in Lighting**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: THET377; and permission of ARHU-School of Theatre, Dance & Performance Studies department. Jointly offered with THET659. Credit only granted for: THET477 or THET659.

Designed for students who have successfully completed THET377 and wish to further develop their lighting design skills. Emphasis is on theoretical design of productions and realized light lab projects. Particular design projects will vary.

Students must pay a \$25.00 lab fee.

5501	Andrew Cissna	Seats (Total: 3)	
	MW 1:00pm - 2:50pm	PAC 2755	Lab

THET481**Theatre Graphics II: Computer Assisted Design**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: THET114 or TDPS201; and THET116; and permission of ARHU-Theatre department. Restriction: Sophomore standing or higher.

Study and practical application of computer generated graphical design for use in theatrical production.

Students must pay a \$25.00 lab fee.

5501	Andrew Cissna	Seats (Total: 8)	
	MW 11:00am - 12:50pm	PAC 2727	Lab

THET489P**Special Topics in Theatre History from 1800 to Present; Shakespeare in Performance**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Topics in the history of world theatre and performance from 1800 to present.

0101	Franklin Hildy	Seats (Total: 15)	
	MW 1:00pm - 2:15pm	PAC 1809	

THET499**Independent Study**

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

An independent study course in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate with term papers, scenic or costume designs, or a stage production.

Contact department for information to register for this course.

THET499B Independent Study; Figure Drawing

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

An independent study course in which each student completes an assigned major theatre project under close faculty supervision. Projects may culminate with term papers, scenic or costume designs, or a stage production.

Students must pay a \$25 lab fee

5501	Susan O'Neill	Seats (Total: 10)
	F 9:00am - 11:50am	PAC 3736

THET600 Introduction to Graduate Research Methods

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Must be a graduate student in a Theatre program. Also offered as: THET700. Credit only granted for: THET600 or THET700. Additional information: Only students in the doctoral program may register for THET700.

Basic skills in theatre research.

0101	Franklin Hildy	Seats (Total: 12)
	W 4:00pm - 6:30pm	PAC 1815

THET606 Teaching Theatre

(Perm req)

Credits: 1 Grading Method: Regular,
Audit

Strategies and materials for teaching a typical introductory course in theatre, with emphasis on specific problems of classroom instruction (e.g., creating a supportive climate, promoting active learning by students, constructing appropriate tests, adapting methods to content, and resolving discipline problems).

0101	Faedora Carpenter	Seats (Total: 10)
	Tu 8:00am - 8:50am	PAC 1809
	<i>This section is for MA/PhD students</i>	

0102	Mikhail Kachman	Seats (Total: 15)
	Th 4:30pm - 5:20pm	PAC 2755
<i>This section is for MFA in Design Students</i>		

THET608I Seminar: Theory and Performance Studies; True Storytelling & Narratives of Cultural Identity

Credits: 3 Grading Method: Regular,
Audit

A repeatable seminar on special topics in theory of the Theatre and Performance Studies.

Cross-listed with AMST629M and ANTH629M. Credit granted for THET608I, ANTH629M, or AMST629M.

0101	Laurie Frederik	Seats (Total: 5)
	M 3:00pm - 5:30pm	PAC 2740

THET608V Seminar: Theory and Performance Studies; Performance, Violence and Memory in the Americas

Credits: 3 Grading Method: Regular,
Audit

A repeatable seminar on special topics in theory of the Theatre and Performance Studies.

0102	Melissa Blanco Borelli	Seats (Total: 10)
	Tu 9:00am - 11:45am	PAC 1924

THET614 Ethnography and Performance

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: ANTH688O, THET608E, or THET614. Formerly: THET608E.

Different types of cultural and artistic performance around the world (theatre, music, dance, sport, festival) are examined. Students learn 1) how various types of live performance are studied ethnographically; 2) what thick description reveals and how it adds to the analysis of performance; and 3) methods for conducting an ethnographic study of performance.

For Fall 2019: Cross-listed with AMST629P and ANTH629P. Credit granted o r THET614, ANTH629P, or AMST629P.

0101	Laurie Frederik	Seats (Total: 10)
	Tu 2:00pm - 4:30pm	PAC 2515C

(Perm req)

Advanced Design Studio in Scenery

Credits: 3 Grading Method: Regular, Audit

A repeatable course that allows students to progress in their design training through a series of carefully and individually structured assignments and projects.

Students must pay a \$25.00 lab fee.

0101	Daniel Conway	Seats (Total: 8)
	MW 9:00am - 11:50am	PAC 2755
0102	Daniel Conway	Seats (Total: 10)
	TuTh 9:00am - 11:50am	PAC 2733

THET649

Advanced Design Studio in Costume

Credits: 3 Grading Method: Regular,
Audit

A series of carefully and individually structured assignments and projects that allows students to progress in their design training.

Students must pay a \$25 lab fee

5501	Helen Huang	Seats (Total: 6)
	TuTh 10:00am - 11:50am	PAC 2755

THET659

Advanced Design Studio in Lighting

Credits: 3 Grading Method: Regular, Audit

A repeatable course that allows students to progress in their design training through a series of carefully and individually structured assignments and projects.

Students must pay a \$25.00 lab fee.

0101	Andrew Cissna	Seats (Total: 6)	
	F 3:00pm - 6:00pm	PAC 2755	
0102	Andrew Cissna	Seats (Total: 6)	
	MW 1:00pm - 2:50pm	PAC 2755	Lab

THET669

Independent Study

(Perm req)

Credits: 1-3 Grading Method: Regular,
Audit

Contact department for information to register for this course.

THET669D Independent Study; Advanced Media Design

Credits: 1-3 Grading Method: Regular,
Audit

5501	Jared Mezzocchi	Seats (Total: 8)	
	F 9:00am - 12:00pm	PAC 2727	Lab

THET669F Independent Study; Figure Drawing

Credits: 3 Grading Method: Regular,
Audit

5501	Susan O'Neill	Seats (Total: 10)	
	F 9:00am - 11:50am	PAC 3736	

THET669P Independent Study; Photoshop

Credits: 3 Grading Method: Regular,
Audit

Students must pay a \$25 lab fee.

5501	Andrew Cohen	Seats (Total: 8)	
	MW 9:00am - 10:50am	PAC 2727	Lab

THET669W Independent Study; Devised Work Collaboration

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Students must pay a \$25 course fee. The class will explore new techniques of telling mythological themes, specifically examining the use of high style-low technical approaches to theatrical storytelling. Students will discuss and explore different avenues of storytelling through design and performance, including scenery, costumes, lighting, projections, puppetry, movement, and performance. Focus will be on the cross-discipline exploration and discussion of design techniques as vehicles for storytelling while helping students examine and push their own style and tools of design. The final project will be a performance piece by the designers in the light lab loosely based off an existing text.

5501	Brian MacDevitt	Seats (Total: 8)	
	MW 9:00am - 10:50am	PAC 2733	

THET679 Advanced Design Studio in Multimedia and Projection Design

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

A repeatable course that allows students to progress in their design training through a series of carefully and individually structured assignments and projects.

Students must pay a \$25 lab fee.

5501	Jared Mezzocchi	Seats (Total: 5)
Contact instructor or department for details.		

THET700 Introduction to Graduate Research Methods

(Perm req)

Credits: 3

Grading Method: Regular,
Audit

Restriction: Must be a graduate student in a Theatre program. Also offered as: THET600. Credit only granted for: THET600 or THET700. Additional information: Only students in the doctoral program may register for THET700.

Basic skills in theatre research.

0101	Franklin Hildy	Seats (Total: 12)
	W 4:00pm - 6:30pm	PAC 1815

THET711 Critical Theory

Credits: 3

Grading Method: Regular

Prerequisite: THET700. Recommended: THET712.

A doctoral methods course. Major developments in modern and postmodern critical theory with particular emphasis on application to the fields of Theatre and Performance Studies.

0101	James Harding	Seats (Total: 10)
	Th 4:00pm - 6:30pm	PAC 1815

THET788 Master's Tutorial

(Perm req)

Credits: 1-6

Grading Method: Regular,
Audit

Collaboration with a faculty member on joint creative and artistic projects.

0201	Franklin Hildy	Seats (Total: 5)
	Contact instructor or department for details.	
0301	Leigh Smiley	Seats (Total: 5)
	Contact instructor or department for details.	
0401	Scot Reese	Seats (Total: 5)
	Contact instructor or department for details.	
0501	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	
0601	James Harding	Seats (Total: 5)
	Contact instructor or department for details.	
0701	Jennifer Newsham	Seats (Total: 5)
	Contact instructor or department for details.	
0801	Leslie Felbain	Seats (Total: 5)
	Contact instructor or department for details.	
0901	Mitchell Hebert	Seats (Total: 5)
	Contact instructor or department for details.	
1101	Mikhail Kachman	Seats (Total: 5)
	Contact instructor or department for details.	
1301	Brian MacDevitt	Seats (Total: 5)
	Contact instructor or department for details.	
1501	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	
1601	Daniel Conway	Seats (Total: 5)
	Contact instructor or department for details.	
1701	Helen Huang	Seats (Total: 5)
	Contact instructor or department for details.	
1801	Andrew Cissna	Seats (Total: 5)
	Contact instructor or department for details.	
2001	Faedra Carpenter	Seats (Total: 5)
	Contact instructor or department for details.	

2005	Laurie Frederik	Seats (Total: 5)
	Contact instructor or department for details.	
2007	Jared Mezzocchi	Seats (Total: 10)
	Contact instructor or department for details.	

THET789

(Perm req)

Master's Practicum

Credits: 3

Grading Method: Regular,
Audit

Participation in creative and artistic activities with professional level theatrical organizations.

0201	Franklin Hildy	Seats (Total: 5)
	Contact instructor or department for details.	
0301	Leigh Smiley	Seats (Total: 5)
	Contact instructor or department for details.	
0401	Scot Reese	Seats (Total: 5)
	Contact instructor or department for details.	
0501	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	
0601	James Harding	Seats (Total: 5)
	Contact instructor or department for details.	
0701	Jennifer Newsham	Seats (Total: 5)
	Contact instructor or department for details.	
0801	Leslie Felbain	Seats (Total: 5)
	Contact instructor or department for details.	
0901	Mitchell Hebert	Seats (Total: 5)
	Contact instructor or department for details.	
1101	Mikhail Kachman	Seats (Total: 5)
	Contact instructor or department for details.	
1301	Brian MacDevitt	Seats (Total: 5)
	Contact instructor or department for details.	
1601	Daniel Conway	Seats (Total: 5)
	Contact instructor or department for details.	

1701	Helen Huang	Seats (Total: 5)
	Contact instructor or department for details.	
1801	Andrew Cissna	Seats (Total: 5)
	Contact instructor or department for details.	
2001	Faedra Carpenter	Seats (Total: 5)
	Contact instructor or department for details.	
2005	Laurie Frederik	Seats (Total: 5)
	Contact instructor or department for details.	
2007	Instructor: TBA	Seats (Total: 5)
	Contact instructor or department for details.	

THET799

(Perm req)

Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

THET888

(Perm req)

Doctoral Practicum in Theatre

Credits: 1-6 Grading Method: Regular

Critical analysis of a phase of a professional field of theatre. Analysis of professional activity through personal observation. Evaluation of the purpose, process, effectiveness, and efficiency of professional activity. Recommendations for training and further research.

0201	Franklin Hildy	Seats (Total: 10)
	Contact instructor or department for details.	
0501	Instructor: TBA	Seats (Total: 10)
	Contact instructor or department for details.	
0601	James Harding	Seats (Total: 5)
	Contact instructor or department for details.	
2001	Faedra Carpenter	Seats (Total: 10)
	Contact instructor or department for details.	
2005	Laurie Frederik	Seats (Total: 10)
	Contact instructor or department for details.	

THET889
Doctoral Tutorial in Theatre

(Perm req)

Credits: 1-6

Grading Method: Regular

Individual research in theatre.

0201	Franklin Hildy	Seats (Total: 10)
Contact instructor or department for details.		
0501	Instructor: TBA	Seats (Total: 10)
Contact instructor or department for details.		
0601	James Harding	Seats (Total: 5)
Contact instructor or department for details.		
2001	Faendra Carpenter	Seats (Total: 10)
Contact instructor or department for details.		
2005	Laurie Frederik	Seats (Total: 10)
Contact instructor or department for details.		

THET898

Pre-Candidacy Research

(Perm req)

Credits: 1-6

Grading Method: Regular

Contact department for information to register for this course.

THET899

Doctoral Dissertation Research

(Perm req)

Credits: 6

Grading Method: Regular,
Audit

Contact department for information to register for this course.

TLPL

Teaching and Learning, Policy and Leadership

Fall 2019

TLPL101

Inquiry Approach to Teaching STEM (Step 1)

Credits: 1

Grading Method: Regular

Additional information: Students must allow for a three-hour window between 7:45 AM and 3:15 PM in their schedule for field experiences in a local school 3-4 times during the semester. A background check is required and will be facilitated by the Terrapin Teacher program coordinator.

Explore STEM teaching and learning and classroom complexity, and develop teaching skills through discussion-based, collaborative class sessions, and experiences in local schools. To explore/understand the fundamentals of inquiry teaching, students will observe, plan and teach student-centered lessons.

0101	Jennifer Manly, Elias Gonzalez M 3:00pm - 4:20pm	Seats (Total: 24) PHY 1108
0201	Margaret Walton M 3:00pm - 4:20pm	Seats (Total: 24) PHY 1120
0301	Steven Karig Th 2:00pm - 3:20pm	Seats (Total: 24) PHY 1108
0401	Anita Sanyal Th 2:00pm - 3:20pm	Seats (Total: 24) PHY 1120
0501	Kayla White Th 4:00pm - 5:20pm	Seats (Total: 24) PHY 1120

TLPL102
Inquiry Teaching of STEM in Middle School

Credits: 2

Grading Method: Regular

General Education: DSSP

Prerequisite: Must have completed TLPL101. Additional information: Attendance at each class session will be vital to student success in the course. To complete the observations and lessons, students must allow a three hour block of time during the local middle school operational hours from 7:45 am to 3:15 pm. A background check is required.

Second course in the Terrapin Teachers teacher preparation sequence. Students gain field experience and continue exploring teaching as a career by conducting teacher observations, and planning and implementing lessons in local, high-need middle school classrooms. Students work closely with UM master teachers to build upon the inquiry-based teaching practices developed in TLPL 101. Students work with mathematics and science curricula while attending to state and district standards, in order to develop and enact lessons that are responsive to students' reasoning in math and science.

0101	Sarah Henson-Darko W 4:00pm - 5:50pm	Seats (Total: 22) PHY 1120
0201	Anita Sanyal Th 4:00pm - 5:50pm	Seats (Total: 24) HBK 0123

TLPL200
Exploring Teaching as a Career

Credits: 3

Grading Method: Regular

General Education: DSSP

Credit only granted for: EDCI210 or TLPL200. Formerly: EDCI210.

Weekly participation as a volunteer tutor in a local school or community program with children or adolescents. Regular campus meetings assist with developing teaching skills and insight.

After the first 5 weeks of class this course transitions into an on-site practicum that includes two hours in a local public school one day per week, as well as commute time to and from campus. The on-site practicum will be within 5 miles of campus and accessible via public transportation. All schools require a Prince Georges County Public School security process that includes fingerprinting and a background check at an additional cost prior to the start of the practicum experience.

0101	Douglas McNamara	Seats (Total: 15)
	Tu 3:00pm - 5:00pm	EDU 3233
	Contact instructor or department for details.	

TLPL250**Historical and Philosophical Perspectives on Education**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHU

Credit only granted for: EDPS210 or TLPL250. Formerly: EDPS210.

An examination of illustrative historical and philosophical examples of the interplay of ideas and events in the shaping of educational aims and practices from ancient cultures to modern technological societies.

0101	Joel Miller	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	EDU 2119
0201	Pamela Callahan	Seats (Total: 30)
	MW 10:00am - 11:15am	TWS 0236
0301	Lisa Eaker	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	EDU 3315
0401	Neil Dhingra	Seats (Total: 30)
	MW 1:00pm - 2:15pm	HBK 0123

TLPL251**Introduction to Teaching**

Credits: 3

Grading Method: Regular

Credit only granted for: EDCI280 or TLPL251. Formerly: EDCI280.

An exploration of teaching in public schools, grades 1-12: student diversity, societal changes, and the expectations of teachers and public schools. Three hour per week field component.

Two-hour seminar each week on campus plus a four-hour lab each week which includes three hours in a local public school classroom and commute time to and from campus. Most schools are within a 20-minute commute with more travel time needed if public transportation is required. Allow for travel time between on-campus coursework and the off-campus public school experience. All schools require a Prince Georges County Public School security process that includes fingerprinting and a background check at an additional cost, prior to the start of the experience.

0101	Lisa Bote Th 4:00pm - 5:50pm Tu 8:00am - 12:00pm	Seats (Total: 8) BPS 1238 Location: TBA Lab
0102	Lisa Bote Th 4:00pm - 5:50pm W 11:30am - 3:30pm	Seats (Total: 8) BPS 1238 Location: TBA Lab
0103	Lisa Bote Th 4:00pm - 5:50pm Th 8:00am - 12:00pm	Seats (Total: 8) BPS 1238 Location: TBA Lab
0104	Lisa Bote Th 4:00pm - 5:50pm Th 11:30am - 3:30pm	Seats (Total: 8) BPS 1238 Location: TBA Lab

TLPL288C

Special Problems in Education; The Power of the Tongue

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSHS,
DVCC, SCIS

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership. Available only to freshmen and sophomore students who have definite plans for individual study of approved problems relative to their preparation for teaching.

Formerly: EDCI288C. Credit only granted for EDCI288C or TLPL288C.

0101	Ebony Shockley W 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 36) ESJ 2309 ONLINE
0102	Ebony Shockley M 11:00am - 11:50am Class time/details on ELMs	Seats (Total: 25) ESJ 2309 ONLINE

This section is restricted to students in Carillon Communities.

TLPL288D

(Perm req)

Special Problems in Education; Developmental Heuristics

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership. Available only to freshmen and sophomore students who have definite plans for individual study of approved problems relative to their preparation for teaching.

0101	Tilahun Beyene	Seats (Total: 115)
Contact instructor or department for details.		

TLPL288W**Special Problems in Education; Forbidden Books: Censorship of Children's & Young Adult Literature**

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit SCIS

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership. Available only to freshmen and sophomore students who have definite plans for individual study of approved problems relative to their preparation for teaching.

0101	Wayne Slater	Seats (Total: 60)
	TuTh 12:30pm - 1:45pm	SQH 1119

TLPL298

(Perm req)

Special Problems in Education

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Exploration of current problems in teaching, learning, policy and leadership. Available only to students who have definite plans for study of approved problems.

Contact department for information to register for this course.

TLPL305B

(Perm req)

Curriculum and Instruction Cluster

Credits: 0 Grading Method:

0101	Instructor: TBA	Seats (Total: 30)
Contact instructor or department for details.		
0201	Instructor: TBA	Seats (Total: 28)
Contact instructor or department for details.		
0301	Instructor: TBA	Seats (Total: 30)
Contact instructor or department for details.		

TLPL305M**Curriculum and Instruction Cluster**

(Perm req)

Credits: 0

Grading Method:

0101	Instructor: TBA	Seats (Total: 20)
Contact instructor or department for details.		

TLPL312**Curriculum and Instruction in Elementary Education: Mathematics**

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: TLPL361. Corequisite: EDCI362, EDCI342, TLPL321, and TLPL362. Restriction: Must be in Elementary Education program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI352 or TLPL312. Formerly: EDCI352.

Materials and procedures to help children sense arithmetical meanings and relationships. Development of an understanding of the number system and arithmetical processes. Includes laboratory/field experiences.

0101	Kelly Ivy	Seats (Total: 0)
	M 12:00pm - 2:45pm	EDU 2121
Contact instructor or department for details.		
0201	Tarik Buli	Seats (Total: 0)
	Th 8:30am - 11:15am	EDU 2121
Contact instructor or department for details.		
0301	Imani Goffney	Seats (Total: 0)
	Tu 12:00pm - 2:45pm	EDU 2121
Contact instructor or department for details.		

TLPL321**Curriculum and Instruction in Elementary Education: Science**

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: TLPL361. Corequisite: TLPL312, EDCI362, EDCI342, and TLPL362. Restriction: Must be in Elementary Education program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI372 or TLPL321. Formerly: EDCI372.

Objectives, methods, materials and activities for teaching science in the elementary school; emphasis on teaching strategies which help children learn the processes and concepts of science. Includes laboratory/field experiences.

0101	Amy Green	Seats (Total: 0)
	M 8:30am - 11:15am	EDU 2212
	Contact instructor or department for details.	
0201	Hannoori Jeong	Seats (Total: 0)
	Th 12:00pm - 2:45pm	EDU 2212
	Contact instructor or department for details.	
0301	Amy Green	Seats (Total: 0)
	Tu 8:30am - 11:15am	EDU 2212
	Contact instructor or department for details.	

TLPL340 Introduction to Children's Literature and Critical Literacy

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be in Elementary Education program; or must be a Pre-Education Major. Credit only granted for: EDCI443 or TLPL340. Formerly: EDCI443.

Analysis of literary materials for children and youth. Timeless and ageless books, and outstanding examples of contemporary publishing. Evaluation of the contributions of individual authors, illustrators and children's book awards.

0101	Brooke Dalesio	Seats (Total: 22)
	MW 1:00pm - 2:15pm	EDU 2102

TLPL360 Foundations of Education

Credits: 3 Grading Method: Regular, General Education: DSHS
Pass-Fail, Audit

Credit only granted for: EDPS301 or TLPL360. Formerly: EDPS301.

Social context of education and conflicts over philosophies, values, and goals that are reflected in educational institutions in our pluralistic society. Helps teachers become reflective, critical thinkers about the social and philosophical issues they face and the choices they make.

0101	Douglas McNamara	Seats (Total: 30)
	TuTh 9:30am - 10:45am	EDU 1121
0201	Jason Saltmarsh	Seats (Total: 30)
	MW 11:00am - 12:15pm	EDU 2119

0301	Mary Johnson	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	EDU 1121

TLPL401 Student-Centered Curriculum and Instruction

(Perm req)

Credits: 3

Grading Method: Regular

General Education: DSSP,
DVCC

Prerequisite: Permission of instructor; and TLPL102; and must have completed or be concurrently enrolled in TLPL488M. Credit only granted for: TLPL488P or TLPL401. Formerly: TLPL488P. Additional information: Field experience for this course will require students to be available for a 2-4 hour block of time at various points throughout the semester to complete observations and teach lessons between 8:00 a.m. and 3:30 p.m. A background check is required and will be facilitated through the Terrapin Teacher program coordinator.

A focus on using student-centered teaching and learning approaches in high school STEM classrooms. Students will develop and implement a multi-day series of lessons, building upon the foundations of inquiry-based practices developed in prior courses. Students will also consider the implications of cultural awareness on teaching practices broadly, as well as in the specific contexts of their fieldwork.

0101	Sarah Henson-Darko	Seats (Total: 24)
	TuTh 3:30pm - 4:50pm	PHY 1120G
0201	Dana Grosser-Clarkson	Seats (Total: 24)
	TuTh 3:30pm - 4:50pm	PHY 1108

TLPL403 Teaching and Learning High School Mathematics

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: Must have 2 semesters of calculus; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Corequisite: EDCI355. Restriction: Must be in Secondary Educ: Mathematics program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI455 or TLPL403. Formerly: EDCI455.

Methods of teaching and assessing the high school mathematics curriculum; aligning tasks and activities to curriculum standards; lesson planning; and selection and use of technology. The course also focuses on managing large group dynamics in the high school mathematics classroom.

0101	Dana Grosser-Clarkson	Seats (Total: 20)
	M 5:00pm - 8:00pm	PHY 1108

TLPL413**Teaching and Learning Middle School Mathematics**

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP

Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI457 or TLPL413. Formerly: EDCI457.

Methods of teaching and assessing the middle school mathematics curriculum. Understanding the conceptual difficulties students have in moving from whole numbers to rational numbers, additive thinking to multiplicative thinking, and arithmetic to algebra. Lesson planning and selection of technology and other materials are applied in the context of supervised tutoring of students having difficulty in middle school mathematics. Lab and field experience required. Supervised tutoring takes place on site at a local middle school therefore TLPL413 students will be expected to travel to a local middle school for 8-10 of the class meetings.

0101	Monica Anthony	Seats (Total: 25)
	TuTh 3:10pm - 5:00pm	EDU 2121

TLPL420**Knowledge, Reasoning, and Learning in Science**

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP

Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: TLPL420 or EDCI411. Formerly: EDCI411.

For prospective science teachers. Investigations of the nature of knowledge, reasoning, and learning in middle and secondary science. Readings from cognitive science and science education research; studies of student thinking in interview and classroom observations; analyses of curricula. Includes laboratory and field experiences.

0101	Madiha Moin	Seats (Total: 0)
	TuTh 3:30pm - 4:45pm	EDU 2212

TLPL423**Interdisciplinary Teaching in the Middle Grades I**

Credits: 2

Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: TLPL413 and TLPL420; or permission of instructor. Corequisite: EDCI360 and TLPL475. Restriction: Minimum cumulative GPA of 2.75; and must be in the Middle School Teacher Education Program, major code 0804P. Credit only granted for: EDCI413 or TLPL423. Formerly: EDCI413.

For prospective middle school teachers. Studying and planning interdisciplinary instructional practices in middle school. Utilizes context and experiences from students' field placements. Use of technology and incorporation of technology into instruction.

0101	Janet Walkoe	Seats (Total: 0)
	Th 10:00am - 11:50am	EDU 3236

TLPL425 Learning and Teaching in Science

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: TLPL420; or permission of instructor. Restriction: Must be in Secondary Educ: Science program. Credit only granted for: EDCI470 or TLPL425. Formerly: EDCI470.

Studies of student learning and instructional practices in science teaching.

0101	Jennifer Mesiner	Seats (Total: 20)
	M 5:00pm - 8:00pm	PHY 1120

TLPL433 Foundations of Art Education

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Minimum cumulative GPA of 2.75. Credit only granted for: EDCI403 or TLPL433. Formerly: EDCI403.

Introduction to the field of Art Education and the role of the visual arts in grades PreK-12 for today's diverse school populations. The fundamental, historical and philosophic components of art education with an emphasis on arts disciplines and curriculum. Includes a school-based practicum. For those considering art education as a major.

0101	Katherine Coogan	Seats (Total: 19)
	Th 9:00am - 12:00pm	EDU 1315

TLPL436 Studio Processes and Materials: 2D

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: ARTT210. Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department; and junior standing or higher; and must not be in any of the following programs (Early Childhood Education; Elementary Education; Secondary Educ: Science; Secondary Educ: English Language Arts; Secondary Educ: Mathematics; Secondary Educ: Foreign Languages; Secondary Educ: Social Studies; Physical Education; Music Education; Special Education). Credit only granted for: EDCI406 or TLPL436. Formerly: EDCI406.

A discussion/studio format used to develop skills, materials, resources and education strategies for using technology and two-dimensional art in K-12 programs.

0101	Margaret Walker	Seats (Total: 19)
	Th 12:30pm - 4:05pm	EDU 1315

TLPL440 Issues in the Education of English Language Learners

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: EDCI432 or TLPL440. Formerly: EDCI432.

Introduction to and analysis of current and historical research, practice, trends, and public policy issues in education as they relate to English language learners in K-12 and other settings.

0101	Wyatt Hall	Seats (Total: 22)
	TuTh 9:30am - 10:45am	EDU 2102

TLPL442 Foundations of Literacy and Biliteracy Development

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: EDCI435 or TLPL442. Formerly: EDCI435.

An overview of the research on literacy and biliteracy development for English learners. Specifically, the course explores the theoretical models and processes of teaching reading and writing, current literacy/biliteracy issues, assessment, and strategies for developing literacy and biliteracy skills for English learners.

0101	Melinda Martin-Beltran	Seats (Total: 22)
	MW 11:00am - 12:15pm	EDU 2102

TLPL443 Understanding Cross-Cultural Communication for Teaching English Language Learners

Credits: 3 Grading Method: Regular, General Education: DVCC
Pass-Fail, Audit

Credit only granted for: EDCI436 or TLPL443. Formerly: EDCI436.

Theories of intercultural communication and techniques for applying them in the teaching of English as a second language (ESL) and content classes. Research and evaluation of selected aspects of a culture as basis for creating, selecting and using culturally-responsive teaching materials and methods.

0101	Melinda Martin-Beltran	Seats (Total: 25)
	M 1:15pm - 4:00pm	EDU 3233

TLPL445

(Perm req)

Methods I: K-12 World Language Methods and Technology

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

General Education: DSSP

Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI410, TLPL445, EDCI688K, or TLPL695. Formerly: EDCI410.

The first of two sequential courses required for achieving competence i teaching a foreign language. The sequel to this course is EDCI433 (Methods II) entitled: Advanced K-12 Foreign Language Methods and Technology. EDCI410 requires on-going examination of theories relevant to language acquisition. Students will also investigate the instructional methods that reflect those theories. Lab and field experiences required.

0101	Perla Blejer	Seats (Total: 15)
	MW 2:00pm - 3:15pm	EDU 3315

TLPL446**Language Variation and Multilingualism in Elementary Classrooms**

Credits: 3

Grading Method: Regular

Restriction: Must be in Elementary Education program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching and Learning, Policy and Leadership department.

Issues in language variation and multilingualism in elementary classrooms, schools and communities with a focus on classroom practice, assessment, and policy.

0101	Xiaoli Gong	Seats (Total: 0)
	Tu 8:30am - 11:15am	EDU 2121
0201	Kellie Rolstad	Seats (Total: 0)
	W 12:00pm - 2:45pm	EDU 1315
0301	Lijuan Shi	Seats (Total: 0)
	M 12:00pm - 2:45pm	ASY 3207

TLPL447

(Perm req)

Art Education Methods II

Credits: 3

Grading Method: Regular

Prerequisite: TLPL435; or students who have taken courses with comparable content may contact the department. Corequisite: TLPL430. Restriction: Minimum cumulative GPA of 2.75; and must be in Secondary Educ: Art program. Credit only granted for: EDCI423, EDCI603, TLPL447 or TLPL633. Formerly: EDCI423.

Methods II builds upon the pedagogical foundation of Methods I and provides future art teachers with the means for developing pre K-12 art lessons and unit plans for a balanced qualitative art program for today's diverse and inclusive schools and classrooms.

0101	Margaret Walker	Seats (Total: 18)
	Tu 9:00am - 12:00pm	EDU 1315

TLPL450 Advanced K-12 World Language Methods and Technology

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: TLPL445. Corequisite: EDCI438. Restriction: Must be in Secondary Educ: Foreign Languages program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI433, EDCI688A, TLPL450 or TLPL696. Formerly: EDCI433.

Teaches advanced best practices for effective foreign language instruction. Topics include: using authentic assessment and materials, applying national standards, teaching writing and culture, motivating students, providing strategy instruction, infusing technology, preparing for K-12 employment, and creating a professional portfolio.

EDCI438 must be taken concurrently with EDCI433.

0101	Perla Blejer	Seats (Total: 10)
	M 5:00pm - 7:45pm	EDU 2102

TLPL451 Teaching and Learning in Secondary Education: English

(Perm req)

Credits: 3 Grading Method: Regular General Education: DSSP

Credit only granted for: EDCI416 or TLPL451. Formerly: EDCI416.

An introduction for prospective middle and secondary English teachers into the basic issues, concepts, orientations, and processes that shape the teaching of English for diverse students in schools. Candidates explore their own perspectives in relation to local and national trends and develop basic teaching understanding and skills through on-campus seminars, teaching laboratory experiences, and guided field experiences. Students should reserve one full day or two half days per week for field experience.

0101	Peggy Wilson	Seats (Total: 25)
	M 8:30am - 10:15am	EDU 2121
	W 8:30am - 10:15am	EDU 2121 Lab

0102	Peggy Wilson	Seats (Total: 10)	
	M 8:30am - 10:15am	EDU 2121	
	M 2:30pm - 4:15pm	JMZ 1123	Lab

TLPL456 Teaching Writing

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Corequisite: EDCI447. Restriction: Must be in Secondary Educ: English Language Arts program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI467 or TLPL456. Formerly: EDCI467.

Examines current theory, research, best practice, curricula and materials for teaching written communication in grades K-12. Focuses on analytical, argumentative, informative/explanatory, literary analysis, narrative, descriptive, and research writing. Emphasizes instructional planning, assessment, writer problem-solving strategies, information search, development, organization and style appropriate to task, purpose and audience for both non-digital and digital text. English Language Learner and special needs pupil issues considered.

0101	Wayne Slater	Seats (Total: 30)
	Th 5:00pm - 7:45pm	EDU 2121

TLPL457 Literature for Adolescents

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit General Education: DSHU

Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI466 or TLPL457. Formerly: EDCI466.

Reading and analysis of fiction and nonfiction; methods for critically assessing quality and appeal; current theory and methods of instruction; research on response to literature; curriculum design and selection of books.

0101	Montserrat Cubillos Guzman	Seats (Total: 30)
	M 5:00pm - 7:45pm	EDU 0220

TLPL460 Materials and Instruction for Creating Skilled and Motivated Readers, Part I

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in Elementary Education program; and junior standing or higher. Or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI461 or TLPL460. Formerly: EDCI461.

Selecting, evaluating, and using a variety of materials and instructional strategies to create skilled and motivated readers in the elementary grades; Topics include emergent literacy, vocabulary development, reading comprehension and oral reading fluency in diverse classroom settings.

Contact department for information to register for this course.

TLPL461 Materials and Instruction for Creating Skilled and Motivated Readers, Part II

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: TLPL361 and TLPL460. Corequisite: TLPL312, EDCI342, TLPL321, and TLPL362.

Restriction: Minimum cumulative GPA of 2.75; and permission of EDUC-Teaching and Learning, Policy and Leadership department; and must be in Elementary Education program. Credit only granted for: EDCI462 or TLPL461. Formerly: EDCI462.

Selecting, evaluating, and using a variety of materials to create skilled and motivated readers in the elementary grades, particularly in diverse classroom settings; Topics include word analysis, spelling, writing, reading comprehension strategies, directed reading lessons, and explicit instruction.

Contact department for information to register for this course.

TLPL462 Reading in the Secondary School

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Minimum cumulative GPA of 2.75; and must be in one of the following programs (Middle School Education; Secondary Educ: Science; Secondary Educ: English Language Arts; Secondary Educ: Mathematics; Secondary Educ: Foreign Languages; Secondary Educ: Social Studies; Secondary Educ: Art) ; and permission of department required for post-baccalaureate students. Credit only granted for: EDCI463 or TLPL462. Formerly: EDCI463.

Provides secondary school teachers with understanding the need for and approaches to teaching students to read and learn from content area texts.

0101	Olivia Saracho	Seats (Total: 23)
	W 2:00pm - 4:30pm	SQH 1111

TLPL470 Knowledge, Reasoning, and Learning in Secondary Social Studies

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department; and minimum cumulative GPA of 2.75. Credit only granted for: EDCI426 or TLPL470. Formerly: EDCI426.

An exploration of the nature of knowledge and reasoning in social studies disciplines as well as how students learn social studies. Assessment and investigation of students' conceptions and misconceptions as well as their disciplinary thinking. Implications for teaching and initial lesson design are explored through on-campus seminars as well as guided field experiences. Students should reserve a regular half-day per week for the field experience in local schools. This course is required for admission to the secondary social studies double major.

0101	Lisa Eaker	Seats (Total: 30)
	Th 4:15pm - 7:00pm	TYD 1108

TLPL471 Curriculum, Teaching, and Assessment in Secondary Social Studies

(Perm req)

Credits: 3 Grading Method: Regular, Pass-Fail, Audit General Education: DSSP

Prerequisite: TLPL470. Corequisite: EDCI428. Restriction: Must be in Secondary Educ: Social Studies program; and minimum cumulative GPA of 2.75. Or permission of EDUC-Center for Learning & Educational Technology. Credit only granted for: EDCI427 or TLPL471. Formerly: EDCI427.

An exploration of curriculum development, teaching, and assessment in secondary history/social studies. Focus on identifying students' conceptions of social studies topics and designing lessons that advance students' disciplinary thinking and understanding.

0101	Alison Jovanovic	Seats (Total: 15)
	M 5:00pm - 8:00pm	TWS 0236

TLPL475 Equitable Classrooms

Credits: 2 Grading Method: Regular, Pass-Fail, Audit

Prerequisite: TLPL252, TLPL413, and TLPL420. Corequisite: EDCI360 and TLPL423. Restriction: Minimum cumulative GPA of 2.75; and must be in Middle School Education program. Credit only granted for: EDCI424 or TLPL475. Formerly: EDCI424.

An exploration and application of major theoretical frameworks surrounding equity and critical pedagogy. Creating habits of mind that help teachers see all students as capable of achieving at high levels. Draws on the concurrent field experience.

0101	Nardos Ghebreab	Seats (Total: 0)
	Tu 10:00am - 12:00pm	EDU 2101

TLPL478A Professional Seminar in Education; Art Education

Credits: 1 Grading Method: Regular

Seminar on the issues and problems teacher candidates encounter in classrooms. Exploration of the skills and strategies that best address these challenges.

0101	Margaret Walker	Seats (Total: 20)
	Tu 12:00pm - 1:00pm	EDU 3236

TLPL479A Field Experiences in Education; Art Education

(Perm req)

Credits: 3 Grading Method: Sat-Fail

Field experiences in approved education setting with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

0101	Katherine Coogan	Seats (Total: 10)
	Contact instructor or department for details.	

TLPL479B Field Experiences in Education; Secondary Social Studies Education

(Perm req)

Credits: 2 Grading Method: Sat-Fail

Field experiences in approved education setting with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

0101	Alison Jovanovic	Seats (Total: 35)
	Contact instructor or department for details.	

TLPL479C Field Experiences in Education; English Education

(Perm req)

Credits: 2 Grading Method: Sat-Fail

Field experiences in approved education setting with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Secondary English/speech/drama education majors only. Students must reserve one full day per week for observation.

0101	Peggy Wilson	Seats (Total: 25)
	Contact instructor or department for details.	

TLPL479D Field Experiences in Education; Secondary Mathematics Education

(Perm req)

Credits: 1 Grading Method: Sat-Fail

Field experiences in approved education setting with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

0101	Dana Grosser-Clarkson	Seats (Total: 20)
	Contact instructor or department for details.	

TLPL479E Field Experiences in Education; Middle School Education

(Perm req)

Credits: 1 Grading Method: Sat-Fail

Field experiences in approved education setting with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

0101	Angela Stoltz	Seats (Total: 0)
	Contact instructor or department for details.	

TLPL479F Field Experiences in Education; Science Education

(Perm req)

Credits: 1 Grading Method: Sat-Fail

Field experiences in approved education setting with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

0101	Tranae Johnson	Seats (Total: 15)
	Contact instructor or department for details.	

TLPL479G Field Experiences in Education; Tutoring

(Perm req)

Credits: 1 Grading Method: Sat-Fail

Field experiences in approved education setting with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Must be an Elementary Education major with a minimum cumulative GPA of 2.75. Most schools are within a 20 minute commute with more travel time needed if public transportation is required. Allow for travel time between on-campus coursework and the off-campus school experience. All schools require a background check and fingerprinting, which must be completed annually, prior to the start of the experience, at an additional cost of approximately \$62.

0101	Leslie Gettier	Seats (Total: 12)
	M 9:00am - 12:00pm	Location: TBA Lab

0102	Leslie Gettier M 12:30pm - 3:30pm	Seats (Total: 12) Location: TBA	Lab
0103	Leslie Gettier Tu 9:00am - 12:00pm	Seats (Total: 12) Location: TBA	Lab
0104	Leslie Gettier Tu 12:30pm - 3:30pm	Seats (Total: 12) Location: TBA	Lab
0105	Leslie Gettier Tu 3:00pm - 6:00pm	Seats (Total: 12) Location: TBA	Lab
0106	Leslie Gettier W 9:00am - 12:00pm	Seats (Total: 12) Location: TBA	Lab
0107	Leslie Gettier W 11:00am - 2:00pm	Seats (Total: 12) Location: TBA	Lab
0108	Leslie Gettier W 3:00pm - 6:00pm	Seats (Total: 6) Location: TBA	Lab
0109	Leslie Gettier Th 9:00am - 12:00pm	Seats (Total: 12) Location: TBA	Lab
0110	Leslie Gettier Th 11:00am - 2:00pm	Seats (Total: 12) Location: TBA	Lab
0111	Leslie Gettier Th 3:00pm - 6:00pm	Seats (Total: 6) Location: TBA	Lab
0112	Leslie Gettier F 9:00am - 12:00pm	Seats (Total: 12) Location: TBA	Lab
0113	Leslie Gettier F 12:00pm - 3:00pm	Seats (Total: 12) Location: TBA	Lab
0114	Leslie Gettier Th 6:00pm - 9:00pm	Seats (Total: 12) Location: TBA	Lab

(Perm req)

Credits: 1

Grading Method: Sat-Fail

Field experiences in approved education setting with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

0101	Perla Blejer	Seats (Total: 10)
	Contact instructor or department for details.	

TLPL481

Embracing Diversity in the Classroom Community

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Admission to teacher education program; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: TLPL481 or EDCI475. Formerly: EDCI475.

An exploration of the richness and complexity of student diversity that teacher candidates will encounter in K-12 classrooms. Students will engage in critical reflection around diversity and equity issues.

0101	Jennifer Burris	Seats (Total: 25)
	Tu 3:30pm - 6:15pm	JMZ 0103

TLPL488B

Special Topics in Education; Teaching Academically, Culturally and Linguistically Diverse Students in Secondary Education

Credits: 2

Grading Method: Regular,
Pass-Fail, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Carolyn Fink, Loren Jones	Seats (Total: 0)
	TuTh 9:00am - 9:50am	EDU 3236
0201	Kia McDaniel	Seats (Total: 20)
	W 5:30pm - 7:15pm	ASY 3215

TLPL488F

Special Topics in Education; Promoting Skilled and Motivated Readers in Elementary Classrooms (Part 2)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Peter Afflerbach Tu 12:10pm - 2:45pm	Seats (Total: 0) EDU 1315
0201	Loretta Holmberg-Masden W 8:30am - 11:15am	Seats (Total: 0) EDU 2212
0301	Ayanna Baccus M 8:30am - 11:15am	Seats (Total: 0) EDU 3315

TLPL488G Special Topics in Education; Teaching and Learning Mathematics in the Elementary School Part 2

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

Contact department for information to register for this course.

TLPL488M Special Topics in Education; Knowing and Learning

(Perm req)

Credits: 3 Grading Method: Regular, General Education: DSHS
Pass-Fail, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

Prerequisite: permission of department.

0101	Lawrence Clark W 4:00pm - 6:50pm	Seats (Total: 22) PHY 1108
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TLPL488R Special Topics in Education; Assessing Language and Literacy Development in Elementary Classrooms

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Tara Johnston M 9:00am - 11:45am	Seats (Total: 24) EDU 3236
0201	Peter Afflerbach Tu 9:00am - 11:45am	Seats (Total: 28) CSI 3120

0301	Matthew Hurt	Seats (Total: 28)
	Th 9:00am - 11:45am	EDU 2212

TLPL488V Special Topics in Education; History of Art Education

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Margaret Walker	Seats (Total: 5)
	Tu 4:15pm - 7:00pm	EDU 1315

TLPL489 Internship in Education

(Perm req) Credits: 1-12 Grading Method: Sat-Fail

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Contact department for information to register for this course.

TLPL489A Internship in Education; Art

(Perm req) Credits: 12 Grading Method: Sat-Fail

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Contact department for information to register for this course.

TLPL489B Internship in Education; Social Studies/History

Credits: 1-12 Grading Method: Sat-Fail

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Contact department for information to register for this course.

TLPL489D Internship in Education; Mathematics

(Perm req) Credits: 12 Grading Method: Sat-Fail

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Contact department for information to register for this course.

TLPL489G Internship in Education; TEACHING RESIDENCY

(Perm req)

Credits: 3 Grading Method: Sat-Fail

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

There is a lab fee of \$375 associated with this course

0101	Deborah Lewin, Lisa Bote	Seats (Total: 30)
	Contact instructor or department for details. TWS 0320	
	F 12:00pm - 2:50pm	
0201	Brooke Dalesio, Lisa Bote	Seats (Total: 30)
	Contact instructor or department for details. TWS 0320	
	F 12:00pm - 2:50pm	
0301	Tracy Dunheimer, Lisa Bote	Seats (Total: 0)
	Contact instructor or department for details. TWS 0320	
	F 12:00pm - 2:50pm	

TLPL498 Special Problems in Education

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail, Audit

Exploration of current problems in teaching, learning, policy and leadership. Available only to students who have definite plans for study of approved problems.

Contact department for information to register for this course.

TLPL606 Teaching and Learning Mathematics in Secondary Schools

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Enrollment in a University of Maryland program leading to teacher certification; and bachelor's degree in mathematics or related field; and 2 semesters of calculus. Credit only granted for: EDCI651 or TLPL606. Formerly: EDCI651.

TLPL625

Credits: 3

Credit only granted for: EDCI671 or TLPL625. Formerly: EDCI671.

Identification of problems in teaching science. Methods for improving the effectiveness of science education.

Contact department for information to register for this course.

TLPL626

Credits: 3

Prerequisite: TLPL420; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Restriction: Must be in the Maryland Master's Certification program; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI675 or TLPL626. Formerly: EDCI675.

Developing practices of instruction in science teaching in the context of understanding student science learning.

Contact department for information to register for this course.

TLPL632

Credits: 3

Credit only granted for: EDCI602 or TLPL632. Formerly: EDCI602.

Critical investigation of art, and curriculum implications.

0101	Dale Placek	Seats (Total: 17)
	Tu 4:15pm - 7:00pm	EDU 1315

TLPL633

Credits: 3

Prerequisite: EDCI680; or TLPL435. Restriction: Must be in a major within the EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI423, EDCI603, TLPL447 or TLPL633. Formerly: EDCI603.

Builds upon the pedagogical foundation of an initial art education methods course and provides future art teachers with the means for developing PreK-12 art lesson/unit plans for a balanced qualitative art program for today's diverse and inclusive schools/classrooms. Integrating art with other subject areas.

Contact department for information to register for this course.

TLPL636 Trends in Secondary School Curriculum: English

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: EDCI640 or TLPL636. Formerly: EDCI640.

Recent developments in educational thinking and practice on the curriculum in English education.

Contact department for information to register for this course.

TLPL640 Assessing, Diagnosing, and Teaching Writing

Credits: 3 Grading Method: Regular, Audit

Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI673 or TLPL640. Formerly: EDCI673.

Examines current theory, research, best practice, curricula and materials for teaching written communication in middle and secondary schools in order to survey, review and select formal and informal assessments and diagnostic strategies useful for writing teachers. Focuses on validity and reliability issues. Includes instructional planning and development of instructional materials for implementing appropriate individual, small-group and large-group instruction. English Language Learner (TESOL and SIOP) and special needs (inclusion) pupil issues considered.

Contact department for information to register for this course.

TLPL641 Reading, Cognition, and Instruction: Reading in the Content Areas I

Credits: 3 Grading Method: Regular

Credit only granted for: EDCI625 or TLPL641. Formerly: EDCI625.

Provides middle and secondary education students with an understanding of the interactive nature of the reading process, the use of research-based instructional strategies, the relationship between vocabulary development and student concept development, the design of strategic reading instruction, the methods for assessing content area literacy, and the ability to plan instruction and communicate with students, parents, and allied professionals.

Contact department for information to register for this course.

TLPL645 **Content Area Reading**

(Perm req) Credits: 3 Grading Method: Regular, Audit

Prerequisite: EDCI362; or TLPL462; or students who have taken courses with comparable content may contact the department. Credit only granted for: EDCI661 or TLPL645. Formerly: EDCI661.

Research-based strategies for improving reading to learn in the content areas (K-12).

0101	Ying Alice Zhang	Seats (Total: 20)
	Tu 5:00pm - 7:45pm	KNI 1103

TLPL650 Understanding, Evaluating and Using Research in School Reading Programs

Credits: 3 Grading Method: Regular,
 Audit

Credit only granted for: EDCI663 or TLPL650. Formerly: EDCI663.

Focus on understanding, critiquing, and applying reading/literacy research; reviewing research to improve practice; analyzing data at the district, school, classroom, and student levels to improve reading instruction.

0101	Olivia Saracho	Seats (Total: 25)
	Th 5:00pm - 7:45pm	EDU 1121

TLPL653 Clinical Assessment in Reading

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: TLPL645 and TLPL650; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI664 or TLPL653. Formerly: EDCI664.

Clinical diagnostic techniques and materials for assessing reading strengths and needs.

0101	Ayanna Baccus	Seats (Total: 25)
	M 5:00pm - 7:45pm	JMZ 1224

TLPL655 Student Assessment in the Second Language Classroom

Credits: 3 Grading Method: Regular,
 Audit

Credit only granted for: EDCI631 or TLPL655. Formerly: EDCI631.

Analysis of standardized and teacher-made FL/ESL tests; emphasis on principles of FL/ESL test construction. Field testing of commercial and teacher-made materials.

Contact department for information to register for this course.

TLPL656 Teaching Culturally and Linguistically Diverse Exceptional Learners

Credits: 3 Grading Method: Regular

Explores cross-cultural and linguistic diversity as they relate to identification procedures for and education of English learners with exceptional needs beyond the second language acquisition process such as learning disabilities and gifted & talented.

0101	Drew Fagan	Seats (Total: 20)
	Th 5:00pm - 7:45pm	EDU 3236

TLPL657 Teaching for Cross Cultural Communication

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI633 or TLPL657. Formerly: EDCI633.

Theories of intercultural communication and techniques for applying them in the teaching of English as a second language (ESL) and content classes. Research and evaluation of selected aspects of a culture as basis for creating, selecting and using culturally-responsive teaching materials and methods.

0101	Melinda Martin-Beltran	Seats (Total: 13)
	W 5:15pm - 8:00pm	TWS 1320

TLPL660 Foundations of Literacy and Biliteracy Development

Credits: 3 Grading Method: Regular, Audit

Prerequisite: TLPL665. Credit only granted for: EDCI636 or TLPL660. Formerly: EDCI636.

An overview of the research on literacy and biliteracy development for English learners. Specifically, the course explores the theoretical models and processes of teaching reading and writing, current literacy/biliteracy issues, assessment, and strategies for developing literacy and biliteracy skills for English learners.

Contact department for information to register for this course.

TLPL661 Multiliteracies: Theory and Practice

Credits: 3 Grading Method: Regular, Audit

Prerequisite: TLPL665. Credit only granted for: EDCI638, EDCI688J, or TLPL661. Formerly: EDCI638 and EDCI688J.

Explores the theoretical constructs and practical manifestations of multiliteracies in communities and schools by presenting an overview of the research on the constructs of New Literacy Studies, Critical Literacy, Digital Literacy, and Funds of Knowledge, as well as the practical implications of teaching reading and writing to culturally and linguistically diverse learners in content areas (i.e., language arts, math, science, social studies, etc.) in classrooms.

0101	Megan Stump	Seats (Total: 20)
	M 5:00pm - 7:45pm	EDU 1121

TLPL662 Second Language Acquisition

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI732 or TLPL662. Formerly: EDCI732.

Major theoretical approaches to second language acquisition. For teaching English to speakers of other languages (TESOL).

IH25	Sarah Moore	Seats (Total: 25)
	Meets October 28, 2019 - December 6, 2019	
	Class time/details on ELMs	ONLINE
	<i>Z128 Outreach Program. Registration restricted to program participants.</i>	

TLPL664 Foundations of Second Language Education: Legal, Social and Historical Trends and Issues

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: EDCI630 or TLPL664. Formerly: EDCI630.

Knowledge of history, research, current practice and public policy issues in the field of second language education from kindergarten to post-secondary settings. Required for TESOL certification program.

0101	Jeff MacSwan	Seats (Total: 20)
	Class time/details on ELMs	ONLINE

TLPL665 Methods of Teaching ESOL

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: EDCI634 or TLPL665. Formerly: EDCI634.

This course presents a survey of the historical and current approaches, methods, and techniques of teaching English to speakers of other languages, from grammar to translation to audiolingual and communicative approaches. Additionally, successful classroom practices that address the needs of culturally diverse and language minority students will be analyzed.

0101	Loren Jones	Seats (Total: 20)
	M 5:00pm - 7:45pm	EDU 1315

TLPL666 English Grammar for Teachers of English to Speakers of Other Languages

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI635 or TLPL666. Formerly: EDCI635.

English grammar and methods of teaching grammar for graduate, prospective and current teachers of English to speakers of other languages. Analysis of the major grammatical structures of American English. Discussion of the role of teaching grammar, and effective classroom methods and techniques for the English as a second/foreign language classroom.

0101	Kellie Rolstad	Seats (Total: 25)
	Tu 5:00pm - 7:45pm	EDU 2121

TLPL668 Developing a Professional Portfolio

Credits: 1-3 Grading Method: Regular,
Audit

Students will examine issues of performance assessment and develop professional portfolios following the guidelines established by the National Board of Professional Teaching Standards. Drawing on the research data collected throughout their program and relying on inquiry, reflections, and analysis, they will synthesize and present the body of their teaching experience.

Contact department for information to register for this course.

TLPL670 Economics of Education

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: EDPS615 or TLPL670. Formerly: EDPS615.

An introduction to the application of economic principles to the study of education policy. The course content revolves around issues of efficiency, equity, and freedom of choice. Specific attention is devoted to school finance litigation and reform, practices for raising and allocating resources, and education productivity issues.

0101	David Blazar	Seats (Total: 20)
	W 4:15pm - 7:00pm	EDU 2119

TLPL674 Studying Student Learning in Diverse Settings

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: EDCI611 or TLPL674. Formerly: EDCI611.

This course deepens teacher understanding of student development and th cultural context for teaching through readings and focused field studies. Participants will also begin developing skills needed for investigations using methods of interpretive inquiry.

Contact department for information to register for this course.

TLPL675 Embracing Diversity in Classroom Communities

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: EDCI697 or TLPL675. Formerly: EDCI697.

The course aims to help students understand race, class, gender, and sexuality as systems of privilege, exclusion, marginalization, and the centrality of embracing diversity in the classroom communities to promote the success of all students.

0101	Stephanie Brown	Seats (Total: 25)
	M 6:00pm - 8:30pm	EDU 2121
	Class time/details on ELMs	ONLINE

TLPL677 Reframing Teacher Professionalism: Achieving Teacher Leadership

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: EDCI682 or TLPL677. Formerly: EDCI682.

Understanding the profession of teaching, teacher leadership, and the knowledge base that undergirds the teaching profession. Multiple perspectives on teaching in the current debate on school reform and how they are aligned across the political spectrum.

0101	David Imig	Seats (Total: 20)
	M 4:15pm - 7:00pm	EDU 2212A

TLPL678 Professional Seminar in Education

Credits: 1-3 Grading Method: Regular, Audit

Seminar on the issues and problems teacher candidates encounter in classrooms. Exploration of the skills and strategies that best address these challenges.

Contact department for information to register for this course.

TLPL683 Educational Sociology

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: TLPL683 or EDPS613. Formerly: EDPS613.

The sociological study of education as an evolving set of methods and procedures, and body of knowledge. Focuses on several major theoretical perspectives used by sociologists studying education.

0101	Claudia Galindo	Seats (Total: 20)
	Tu 7:15pm - 10:00pm	EDU 1107

TLPL685 Teaching Social Studies in Elementary Schools

Credits: 3 Grading Method: Regular, Audit

Credit only granted for: EDCI622 or TLPL685. Formerly: EDCI622.

Examination of current literature and research in the social sciences as they relate to social studies curriculum and instruction.

Contact department for information to register for this course.

TLPL686 Secondary Social Studies Pedagogy

Credits: 3 Grading Method: Regular, Audit

Prerequisite: TLPL470; or EDCI680. Credit only granted for: EDCI627 or TLPL686. Formerly: EDCI627.

The second course in a three-course teaching methods sequence. Addresses two key questions: (1) How do secondary school students think about and learn history/social studies? (2) How can secondary teachers teach history/social studies in ways that promote student learning?

Contact department for information to register for this course.

TLPL688R Special Topics in Education; Explorations in Mathematics for Elementary Teachers

Credits: 3 Grading Method: Regular,
Audit

Special treatment of current topics and issues in teaching, learning, policy and leadership.

Contact department for information to register for this course.

TLPL689 Internship in Education

Credits: 1-9 Grading Method: Regular,
Audit

Internship or residency experiences in school settings with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students admitted to approved teacher education programs.

Student lab fee may apply. Contact program for details.

0101	Perla Blejer	Seats (Total: 10)
Contact instructor or department for details.		
0201	Loren Jones	Seats (Total: 10)
Contact instructor or department for details.		

TLPL695 Methods I: K-12 World Language Methods and Technology

Credits: 3 Grading Method: Regular

Credit only granted for: EDCI410, TLPL445, EDCI688K, or TLPL695. Formerly: EDCI688K. Additional information: Lab and field experiences required.

TLPL 695 requires on-going examination of theories relevant to language acquisition. Students will also investigate the instructional methods that reflect those theories.

0101	Perla Blejer	Seats (Total: 5)
	MW 2:00pm - 3:15pm	EDU 3315

TLPL696 Advanced K-12 World Language Methods and Technology

(Perm req)

Credits: 3 Grading Method: Regular

Prerequisite: TLPL695; and TLPL695. Corequisite: Must be concurrently enrolled in TLPL479J. Credit only granted for: EDCI433, EDCI688A, TLPL450 or TLPL696. Formerly: EDCI688A.

Teaches advanced best practices for effective World Language instruction. Topics include: lesson planning, using authentic assessment and materials, applying national and state standards infusing culture, interdisciplinary content and technology. Classroom management procedures and strategies to create a welcoming and engaging classroom environment. Motivating students and differentiated instruction.

0101	Perla Blejer	Seats (Total: 5)
	M 5:00pm - 7:45pm	EDU 2102

TLPL698 Conducting Research on Teaching

(Perm req)

Credits: 1-3 Grading Method: Regular

Analysis and improvement of educational practice. Research methods used in the study of classroom teaching. Design and conduct of an action research project. Open only to students admitted to approved teacher education programs.

0101	Jennifer Turner	Seats (Total: 20)
	Contact instructor or department for details.	

TLPL699 Master's Seminar

Credits: 3 Grading Method: Regular,
Audit

Directed study for master's degree students writing seminar papers.

Contact department for information to register for this course.

TLPL710 Theory and Research on Mathematical and Scientific Thinking and Learning

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: Admitted to Doctoral Program in Mathematics Education or Science Education; or permission of EDUC-Teaching and Learning, Policy and Leadership department. Credit only granted for: EDCI751 or TLPL710. Formerly: EDCI751.

Study of mathematical and scientific thinking by students at various levels of schooling considered from the perspective of those classic and contemporary theories of learning that are particularly relevant to the study of mathematics and science. Exploration of what it means to understand mathematics and science.

0101	Janet Walkoe	Seats (Total: 20)
	Tu 4:15pm - 7:00pm	HBK 0123

TLPL728 Research Seminar in Mathematics and Science Education

Credits: 1 Grading Method: Regular,
Audit

0101	Daniel Chazan	Seats (Total: 20)
	F 10:00am - 1:30pm	EDU 2121

Credits: 3 Grading Method: Regular, Audit

Dialect, language varieties in school settings; historical and current perspectives on the role of language in learning; theories of school achievement and consequences for language assessment.

0101	Jeff MacSwan	Seats (Total: 20)
	Tu 5:00pm - 7:45pm	EDU 3233

Credits: 3 Grading Method: Regular, Audit

An examination of 'dilemmas of difference' on selected issues that arise at the intersection of law and education policy. Dilemmas and value conflicts imbedded in modern federal and state case law dealing with race, gender, sexual orientation, religion and disability.

0101	Robert Croninger	Seats (Total: 20)
	Tu 4:15pm - 7:00pm	EDU 2101

Credits: 3 Grading Method: Regular, Audit

This seminar provides students with a broad overview of urban education as a field of inquiry by examining the social context of urban schools, how transformative pedagogy is practiced and conceptualized as well as school reform.

0101	Tara Brown	Seats (Total: 20)
	W 4:15pm - 7:00pm	EDU 3233

TLPL788B Special Topics in Education; Critical Perspectives in Ethnographic Research Methods

Credits: 3 Grading Method: Regular,
 Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Rossina Liu	Seats (Total: 20)
	Th 4:15pm - 7:00pm	ASY 3219

TLPL788D Special Topics in Education; Using Stata to Clean and Analyze Big Data in Education

Credits: 1 Grading Method: Regular,
 Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

This course will meet in the COE computer lab.

0101	David Blazar	Seats (Total: 20)
	M 12:00pm - 12:50pm	Location: TBA
<i>Class will be held in the COE computer lab.</i>		

TLPL788E Special Topics in Education; Professional Seminar in Urban Education

(Perm req)

Credits: 3 Grading Method: Regular,
 Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Tara Brown	Seats (Total: 20)
	Tu 4:15pm - 7:00pm	EDU 1107

TLPL788I Special Topics in Education; Research Apprenticeship in the Maryland Longitudinal Data System

(Perm req)

Credits: 1 Grading Method: Regular,
 Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

Students interested in enrolling in this course should first discuss their research ideas and interests with Dr. Blazar. Meeting times will be arranged collectively around students' schedules. Please contact Dr. Blazar (dblazar@umd.edu) for details.

0101	David Blazar	Seats (Total: 20)
	Contact instructor or department for details.	

TLPL788K Special Topics in Education; Seminar in Teacher Education and Supervision

Credits: 1 Grading Method: Regular,
 Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

This course meets bi-weekly.

0101	Olivia Murphy, Jennifer Burris	Seats (Total: 10)
	W 12:30pm - 2:30pm	EGR 3111

TLPL788R Special Topics in Education; Applied Linguistics Doctoral Seminar

(Perm req)

Credits: 1 Grading Method: Regular,
 Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Andrew Elby	Seats (Total: 20)
	M 1:00pm - 3:00pm	Location: TBA

TLPL788T Special Topics in Education; Research Seminar in Technology, Learning and Leadership

Credits: 1 Grading Method: Regular,
 Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	David Weintrop	Seats (Total: 10)
	Tu 1:00pm - 1:50pm	EDU 3315

TLPL788U Special Topics in Education; Race, Whiteness, and Identity

Credits: 3 Grading Method: Regular,
 Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Rossina Liu	Seats (Total: 20)
	Th 7:15pm - 10:00pm	EDU 1107

TLPL788W Special Topics in Education; MA Core: Research Methodologies and Educational Practice

Credits: 3 Grading Method: Regular,
Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Daniel Levin	Seats (Total: 20)
	Th 4:15pm - 7:00pm	EDU 0220

TLPL788Y Special Topics in Education; Pedagogy of Teacher Education

Credits: 3 Grading Method: Regular,
Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	Megan Peercy	Seats (Total: 20)
	W 9:00am - 11:45am	EDU 1315

TLPL788Z Special Topics in Education; Education Policy Research, Writing, and Presentation Seminar

Credits: 1 Grading Method: Regular,
Audit

Special and intensive treatment of current topics and issues in teaching, learning, policy and leadership.

0101	David Blazar	Seats (Total: 20)
	F 12:00pm - 12:50pm	EDU 1121

TLPL789 Internship in Education

Credits: 1-3 Grading Method: Sat-Fail

Approved professional experiences with appropriate supervision. Open only to students admitted to approved master's and doctoral specializations.

Contact department for information to register for this course.

TLPL791 Qualitative Research I: Design and Fieldwork

(Perm req)

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: EDCI790. Credit only granted for: EDCI791 or TLPL791. Formerly: EDCI791.

Examines the theoretical and epistemological moorings of different types of qualitative research. Students apply selected field research methods to problems of professional practice in schools and communities while considering central issues and dilemmas that arise while engaging in fieldwork.

0101	Jennifer Turner	Seats (Total: 20)
	W 4:35pm - 7:20pm	EDU 2212

TLPL794 Foundations of Educational Research I

Credits: 3 Grading Method: Regular

Restriction: Must be in Teaching and Learning, Policy and Leadership (Doctoral) program. Credit only granted for: EDPS788P or TLPL794. Formerly: EDPS788P.

An introduction to the "contested terrain" of education research. It examines major conceptual, methodological and political issues embedded in efforts to carry out education research and focuses on the development of the analytic dispositions and communication skills required to carry out research that meets the variously defined quality, utility and significance standards of scholarship in the field.

0101	Betty Malen	Seats (Total: 25)
	Th 4:15pm - 7:00pm	EDU 1107

TLPL798 Special Problems in Education

(Perm req)

Credits: 1-6 Grading Method: Regular,
Audit

Exploration of current problems in teaching, learning, policy and leadership. Available only to master's or doctoral candidates under the direction of their advisors.

Contact department for information to register for this course.

TLPL799 Master's Thesis Research

(Perm req)

Credits: 1-6 Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

TLPL860 Seminar on Case Study Methods

Credits: 3 Grading Method: Regular,
Audit

Prerequisite: TLPL690; or students who have taken courses with comparable content may contact the department. Credit only granted for: EDPS730 or TLPL860. Formerly: EDPS730.

Conceived as both an analysis of case study methods and a laboratory for applying course content to research topics or projects of interest to students, it addresses a range of conceptual, methodological, ethical, political, and logistical issues embedded in efforts to conduct thoughtful, "disciplined" case study research. Since this focuses on case study research, it may be particularly helpful to students who are exploring various approaches to research or who are contemplating using case study methods in their theses and/or dissertations.

0101	Betty Malen	Seats (Total: 20)
	M 4:15pm - 7:00pm	EDU 2119

TLPL888 Apprenticeship in Education

(Perm req)

Credits: 1-8

Grading Method: Regular,
Audit

Apprentice practice under professional supervision in an area of competence compatible with the student's professional goals. Credit not to be granted for experience accrued prior to registration. Open only to degree- and certificate-seeking graduate students.

Contact department for information to register for this course.

TLPL889 Internship in Education

(Perm req)

Credits: 3-8

Grading Method: Regular,
Audit

Internship experiences at a professional level of competence in a particular role with appropriate supervision. Credit not to be granted for experience accrued prior to registration. Open only to students advanced to candidacy for doctoral degree.

Contact department for information to register for this course.

TLPL898 Pre-Candidacy Research

Credits: 1-8

Grading Method: Regular

Contact department for information to register for this course.

TLPL899 Doctoral Dissertation Research

(Perm req)

Credits: 1-8

Grading Method: Regular, Sat-
Fail

Registration required to the extent of 6-9 hours for an Ed.D. Project and 12-18 hours for a Ph.D. Dissertation.

Contact department for information to register for this course.

TLTC222

Academic Technologies

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of TLTC required - enrollment restriction. Credit only granted for: AGNR270, ARHU299T, BSOS288V, or TLTC222.

Teaches students the instructional technology skills and strategies needed to support faculty teaching in technology-rich physical environments like the university's TERP classrooms as well as virtual environments such as ELMS-Canvas.

0101	Deborah Mateik	Seats (Total: 40)
	M 5:00pm - 7:30pm	ESJ 2309

TLTC333

Fundamentals of Academic Peer Mentoring

(Perm req)

Credits: 1

Grading Method: Regular

Restriction: Permission of TLTC required - enrollment restriction.

How should scientific research influence the way we study and advance the academic performance of others? Learn about the scholarship of teaching and learning and develop the applied skills to support active learning as an academic peer mentor. Whether or not you ultimately pursue a career as an educator, the more effectively you can coach and support the performance of other people, and the more successful you will be. Guided online and face-to-face participation will culminate in a portfolio of your teaching activities and professional development.

Click here for more course information.

0101	Danielle Pafe	Seats (Total: 20)
	Class time/details on ELMs	ONLINE
	M 11:00am - 11:50am	ESJ 1103
	<i>This section will meet in person on the following dates: September 16, October 21, and November 11.</i>	
0102	Danielle Pafe	Seats (Total: 20)
	Class time/details on ELMs	ONLINE
	M 2:00pm - 2:50pm	ESJ 1103
	<i>This section will meet in person on the following dates: September 16, October 21, and November 11.</i>	

0103	Danielle Pafe Class time/details on ELMs M 3:00pm - 3:50pm <i>This section will meet in person on the following dates: September 16, October 21, and November 11.</i>	Seats (Total: 20) ONLINE ESJ 1103
0104	Danielle Pafe Class time/details on ELMs Tu 12:30pm - 1:20pm <i>This section will meet in person on the following dates: September 17, October 22, and November 12.</i>	Seats (Total: 20) ONLINE ESJ 0201
0105	Danielle Pafe Class time/details on ELMs Tu 2:00pm - 2:50pm <i>This section will meet in person on the following dates: September 17, October 22, and November 12.</i>	Seats (Total: 20) ONLINE ESJ 0201
0106	Danielle Pafe Class time/details on ELMs Tu 3:30pm - 4:20pm <i>This section will meet in person on the following dates: September 17, October 22, and November 12.</i>	Seats (Total: 20) ONLINE ESJ 0201
0107	Danielle Pafe Class time/details on ELMs W 12:00pm - 12:50pm <i>This section will meet in person on the following dates: September 18, October 23, and November 13.</i>	Seats (Total: 20) ONLINE ESJ 1103
0108	Danielle Pafe Class time/details on ELMs W 5:00pm - 5:50pm <i>This section will meet in person on the following dates: September 18, October 23, and November 13.</i>	Seats (Total: 20) ONLINE ESJ 1103

0109	Danielle Pafe	Seats (Total: 20)
	Class time/details on ELMs	ONLINE
	Th 9:30am - 10:20am	ESJ 1103
<i>This section will meet in person on the following dates: September 19, October 24, and November 14.</i>		
0110	Danielle Pafe	Seats (Total: 20)
	Class time/details on ELMs	ONLINE
	Th 11:00am - 11:50am	ESJ 1103
<i>This section will meet in person on the following dates: September 19, October 24, and November 14.</i>		

TLTC399 Independent Study in Academic Peer Mentoring

(Perm req)

Credits: 1-3 Grading Method: Regular

Earn academic credit for the time spent supporting a course in TLTC's Academic Peer Mentoring Program (AMP).

Prerequisite: Must have completed or be concurrently enrolled in TLTC333. Restriction: Permission of TLTC required - enrollment restriction. Repeatable to 6 credits. Earn academic credit for the time spent supporting a course in TLTC's Academic Peer Mentoring Program (AMP).

Contact department for information to register for this course.

TLTC699A Special Topics in University Teaching and Learning; Improv to Improve Communication In and Beyond the Classroom

Credits: 1 Grading Method: Sat-Fail,
Audit

Special topics courses for graduate students interested in university teaching and learning.

0101	Linda Macri, Jade Olson	Seats (Total: 12)
	Meets September 9, 2019 - November 18, 2019	
	M 1:15pm - 2:50pm	HBK 0125

TLTC798 University Teaching and Learning

(Perm req)

Credits: 1-2 Grading Method: Regular

Special topic courses directed at experienced graduate teaching assistants who are interested in university teaching and learning issues. Can be used by students for participation in the University Teaching and Learning Program.

Special topics course directed at experienced graduate teaching assistants who are interested in university teaching and learning issues. Can be used by students for participation in the University Teaching and Learning Program. Click here for more course information: tltc.umd.edu/798

0101	Marissa Stewart	Seats (Total: 20)
	Tu 2:00pm - 4:00pm	ESJ 1103

UMEI **Maryland English Institute** **Fall 2019**

UMEI002 **English as a Foreign Language: Intermediate I**

(Perm req)

Credits: 12 Grading Method: Sat-Fail

Restriction: Permission of EDUC-Dean-Maryland English Institute department.

Intensive course for the non-native speaker of English who has had some previous instruction in English. Emphasis on improving listening and speaking skills, on mastering intermediate grammatical structures, and on expanding vocabulary. Includes practice in reading and writing appropriate to the level. Special fee required for this course. This course does not carry credit towards any degree at the University and does not count in the retention plan.

0101	Eda Aladagli Yoon, Caralyn Bushey	Seats (Total: 20)
	MTuWThF 9:00am - 11:50am	COL 3109
	MTuWThF 1:00pm - 2:50pm	COL 3109

UMEI003 **English as a Foreign Language: Intermediate II**

(Perm req)

Credits: 12 Grading Method: Sat-Fail

Restriction: Permission of EDUC-Dean-Maryland English Institute department.

Intensive course for the non-native speaker of English who has mastered the essential structures of English grammar. Emphasis on improving communicative skills for a wide range of linguistic situations, on rapid expansion of vocabulary, and on improving reading comprehension and basic writing skills. Special fee required for this course. This course does not carry credit towards any degree at the University and does not count in the retention plan.

0101	Eda Aladagli Yoon, Caralyn Bushey	Seats (Total: 20)
	MTuWThF 9:00am - 11:50am	COL 3109
	MTuWThF 1:00pm - 2:50pm	COL 3109

UMEI004 **English as a Foreign Language: Intermediate III**

(Perm req)

Credits: 12 Grading Method: Sat-Fail

Restriction: Permission of EDUC-Dean-Maryland English Institute department.

Intensive course for the non-native speaker of English who has a good command of the basic features of spoken and written English. Emphasis on refining speaking and listening skills, on improving reading speed and comprehension of academic texts, and on developing writing skills for academic courses. Special fee required for this course. This course does not carry credit towards any degree at the University and does not count in the retention plan.

0101	Marilena Draganescu, Caralyn Bushey	Seats (Total: 20)
	MTuWThF 9:00am - 11:50am	COL 3110
	MTuWThF 1:00pm - 2:50pm	COL 3110
0301	Annelies Galletta, Louise Godley	Seats (Total: 20)
	MTuWThF 9:00am - 11:50am	ATL 2330
	MTuWThF 1:00pm - 2:50pm	ATL 2352
0401	Charles Duquette, Louise Godley	Seats (Total: 20)
	MTuWThF 9:00am - 11:50am	HBK 1112
	MTuWThF 1:00pm - 2:50pm	HBK 1112

UMEI005

Advanced English as a Foreign Language

Credits: 6

Grading Method: Sat-Fail,
Audit

Semi-intensive course for the nearly proficient non-native speaker of English needing additional language instruction prior to undertaking full-time academic study. Speaking and listening skills; improvement of reading speed and comprehension; and development of writing skills. Special fee required for this course. This course does not carry credit towards any degree at the University and does not count in the retention plan.

0101	Eric Walker	Seats (Total: 15)
	MTuThF 9:00am - 10:50am	ARC 1127
	<i>This section is restricted to Graduate Students.</i>	
0201	Heather Mehrtens	Seats (Total: 15)
	MTuThF 1:00pm - 2:50pm	SQH 1125
	<i>This section is restricted to Undergraduate Students.</i>	
0301	Eric Walker	Seats (Total: 15)
	MTuThF 1:00pm - 2:50pm	SQH 1111
	<i>This section is restricted to Graduate Students.</i>	

For advanced non-native speakers of English. Practice in speaking skills relevant to the academic situation. Improvement of speaking skills for various classroom activities such as participating in discussions, making appointments with professors, asking for information and presenting oral reports. Special fee required for this course. This course does not carry credit towards any degree at the University and does not count in the retention plan.

Restriction: Must have graduate standing; and permission of EDUC-Dean-Maryland English Institute department.

0101	Susan Gould	Seats (Total: 16)
	MW 3:30pm - 5:30pm	COL 3114
0201	Raymond Smith	Seats (Total: 16)
	TuTh 9:00am - 11:00am	COL 3112

UNIV University Courses Fall 2019

UNIV099 Internship Seminar

(Perm req)

Credits: 0 Grading Method: Sat-Fail

Complements students' supervised work experiences. Open to all majors; all class levels. Involves exploring career options, developing professional work skills, examining the relationship between internship and academic coursework. Course may be repeated.

0101	Trisha Hongcharti, Erica Ely	Seats (Total: 90)
	Contact instructor or department for details.	

UNIV100 The Student in the University

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: EDCP108O or UNIV100. Formerly: EDCP108O.

Introduces students to University life. In a small classroom setting, students will explore how to successfully bridge the gap between high school and college. Study skills, career decision-making, and student development processes will be explored.

0101	Michelle Udeli	Seats (Total: 20)
	Meets September 3, 2019 - November 15, 2019	
	Tu 11:00am - 12:20pm	HBK 0105
	<i>Restricted to first semester students enrolled in UTerp program.</i>	

0201	Laila Asi, Kenneth Kokason M 10:00am - 11:50am <i>Restricted to First Semester BSOS Majors.</i>	Seats (Total: 20) LEF 1221
0202	Hermione Pickett W 1:00pm - 2:50pm <i>Restricted to First Semester BSOS Majors.</i>	Seats (Total: 20) ASY 3219
0203	Christa Slavin Th 3:00pm - 4:50pm <i>Restricted to First Semester BSOS Majors.</i>	Seats (Total: 20) PLS 1115
0204	Christie Cradock, Esme Pierzchala Tu 10:00am - 11:50am <i>Restricted to First Semester BSOS Majors.</i>	Seats (Total: 20) LEF 1222
0205	Bailey Kier, Maya Williams W 3:00pm - 4:50pm <i>Restricted to First Semester BSOS Majors.</i>	Seats (Total: 20) PLS 1146
0206	TC Lloyd Th 10:00am - 11:50am <i>Restricted to First Semester BSOS Majors.</i>	Seats (Total: 20) WDS 1130
0207	Rosalyn Anderson-Howell Tu 3:00pm - 4:50pm <i>Restricted to First Semester BSOS Majors.</i>	Seats (Total: 20) PLS 1111
0208	Kimberly Bethke M 3:00pm - 4:50pm <i>Restricted to First Semester BSOS Majors.</i>	Seats (Total: 20) KEY 0124
0305	Christopher Lester W 6:00pm - 7:50pm <i>Restricted to OMSE - College Success Scholars. Class will meet in TWS 1310.</i>	Seats (Total: 20) Location: TBA
0306	Christopher Lester W 6:00pm - 7:50pm <i>Restricted to OMSE - College Success Scholars. Class will meet in Room TWS 1310.</i>	Seats (Total: 20) Location: TBA

0401	Victoria Shay F 1:00pm - 2:50pm <i>Restricted to first semester students in the Robert H. Smith School of Business.</i>	Seats (Total: 20) VMH 1415
0501	Glenn Kasten-Sportes W 2:00pm - 3:50pm <i>Restricted to students in the College of Education.</i>	Seats (Total: 20) EDU 1107
0502	Jessica Chew Th 1:00pm - 2:50pm <i>Restricted to students in the College of Education.</i>	Seats (Total: 20) EDU 1107
0604	Shannon Bate Th 3:00pm - 4:50pm <i>Restricted to engineering incoming freshmen. Class will start one week late on September 5, 2019.</i>	Seats (Total: 20) EGR 1102
0801	Thomas Steen Meets September 3, 2019 - November 15, 2019 M 2:00pm - 3:50pm <i>Restricted to First Semester Letters and Sciences students.</i>	Seats (Total: 20) PLS 1164
0802	Anita Weisburger Meets September 3, 2019 - November 15, 2019 Tu 2:00pm - 3:50pm <i>Restricted to First Semester Letters and Sciences students.</i>	Seats (Total: 20) JMZ 1122
0804	Gregory Shaffer Meets September 3, 2019 - November 15, 2019 Th 3:30pm - 5:30pm <i>Restricted to First Semester Letters and Sciences students interested in Pre-law.</i>	Seats (Total: 20) PLS 1117
0806	Katie O'Mailey Meets September 3, 2019 - November 15, 2019 W 3:30pm - 5:20pm <i>Restricted to First Semester Letters and Sciences students.</i>	Seats (Total: 20) LEF 1221

0807	Ashley Luster	Seats (Total: 20)
	Meets September 3, 2019 - November 15, 2019	
	Tu 11:00am - 12:50pm	ASY 3219
	<i>For first semester Letters and Sciences students who are interested in STEM (science, technology, mathematics, engineering) majors or careers. Part of the STEM Exploration Series.</i>	
0808	Alexis Foley	Seats (Total: 20)
	Meets September 3, 2019 - November 15, 2019	
	Tu 2:00pm - 3:50pm	PLS 1158
	<i>For first semester Letters and Sciences students who are interested in STEM (science, technology, mathematics, engineering) majors or careers. Part of the STEM Exploration Series.</i>	
0812	Sarah Wilson	Seats (Total: 20)
	Meets September 3, 2019 - November 15, 2019	
	Tu 12:30pm - 2:20pm	TYD 1118
	<i>For first semester Letters and Sciences students who are interested in STEM (science, technology, mathematics, engineering) majors or careers. Part of the STEM Exploration Series.</i>	
0815	Cameron Busacca	Seats (Total: 20)
	Meets September 3, 2019 - November 15, 2019	
	W 9:00am - 10:50am	WDS 0104
	<i>Restricted to First Semester Letters and Sciences students.</i>	
0820	Suzanne Ashour-Bailey	Seats (Total: 20)
	Meets September 3, 2019 - November 15, 2019	
	Th 12:30pm - 2:20pm	PLS 1113
	<i>For first semester Letters and Sciences students who are interested in STEM (science, technology, mathematics, engineering) majors or careers. Part of the STEM Exploration Series.</i>	

0826	Jenna Trupp, Jalah Townsend Meets September 3, 2019 - November 15, 2019 M 3:30pm - 5:20pm <i>Restricted to First Semester Letters and Sciences students.</i>	Seats (Total: 20) TWS 1321
0841	Rachel DiDonna Meets September 3, 2019 - November 15, 2019 Tu 3:30pm - 5:20pm <i>Restricted to First Semester Letters and Sciences students.</i>	Seats (Total: 20) ATL 0201
0850	Devyn Sturdavant Meets September 3, 2019 - November 15, 2019 W 1:00pm - 2:50pm <i>For first semester Letters and Sciences students interested in business. Part of the Business Exploration Series.</i>	Seats (Total: 20) PLS 1164
0851	Noah Jacobs Meets September 3, 2019 - November 15, 2019 M 1:00pm - 2:50pm <i>For first semester Letters and Sciences students interested in business. Part of the Business Exploration Series.</i>	Seats (Total: 20) TLF 1103
0852	Icened Williams Meets September 3, 2019 - November 15, 2019 W 3:00pm - 4:50pm <i>For first semester Letters and Sciences students interested in business. Part of the Business Exploration Series.</i>	Seats (Total: 20) SKN 1112
0854	Marchelle Payne-Gassaway Meets September 3, 2019 - November 15, 2019 M 2:00pm - 3:50pm <i>For first semester Letters and Sciences students who are interested in STEM (Science, Technology, Mathematics, Engineering) majors or careers. Part of the STEM Exploration Series.</i>	Seats (Total: 20) PLS 1115

0857	Steve Leonard	Seats (Total: 20)
	Meets September 3, 2019 - November 15, 2019	
	W 1:00pm - 2:50pm	EDU 3233
	<i>Restricted to First Semester Letters and Sciences students.</i>	
0901	Thomas Gleason	Seats (Total: 20)
	Tu 9:00am - 10:50am	JMZ 3205
	<i>Restricted to Physics majors.</i>	
0902	Kayla Cullum	Seats (Total: 20)
	M 3:00pm - 4:50pm	WDS 1131
	<i>Restricted to BioFire students.</i>	
0903	Jennie Gouker	Seats (Total: 20)
	Tu 2:00pm - 3:50pm	PLS 1168
	<i>Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code: 12031).</i>	
0904	Gene Ferrick	Seats (Total: 20)
	Th 10:00am - 11:50am	BPS 1228
	<i>Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).</i>	
0905	Samantha Guarneri	Seats (Total: 20)
	Tu 11:00am - 12:50pm	EDU 2102
	<i>Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).</i>	
0906	Marsha Guenzler-Stevens	Seats (Total: 20)
	Tu 1:00pm - 2:50pm	JMZ 1124
	<i>Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).</i>	
0907	Eden Garosi	Seats (Total: 20)
	Tu 1:00pm - 2:50pm	PLS 1113
	<i>Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).</i>	
0908	Stephanie Bent	Seats (Total: 20)
	M 2:00pm - 3:50pm	BPS 1234
	<i>Restricted to BSCI(0404A, 0404B, 0404C, 0404D, 0404E-BCHM-CHEM) or UMB-Nursing students (major code: 12031).</i>	

0909	Marina Sanchez W 10:00am - 11:50am <i>Restricted to BSCI-BCHM-CHEM majors or UMB-Nursing students (major code 12031).</i>	Seats (Total: 20) LEF 1221
0910	Amy Alexander M 2:00pm - 3:50pm <i>Restricted to CMNS majors or UMB-Nursing students (major code: 12031).</i>	Seats (Total: 20) SYM 0209
0912	Gerry Strumpf W 12:00pm - 1:50pm <i>Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).</i>	Seats (Total: 15) COL 1102
0915	Marie Bergmeyer M 1:00pm - 2:50pm <i>Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).</i>	Seats (Total: 20) PLS 1111
0916	Kasey Ezzat Tu 10:00am - 11:50am <i>Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).</i>	Seats (Total: 20) ATL 0201
0917	Jimmy McClellan F 1:00pm - 2:50pm <i>Restricted to College Park Scholars - Life Sciences</i>	Seats (Total: 20) CCC 1200
0918	Anne Richardson W 2:00pm - 3:50pm <i>Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).</i>	Seats (Total: 20) PLS 1158
0919	Hang Le Th 3:00pm - 4:50pm <i>Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).</i>	Seats (Total: 20) PLS 1168
0920	Rebecca Ryan F 1:00pm - 2:50pm <i>Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).</i>	Seats (Total: 20) ATL 2316
0925	Justin Nero W 1:00pm - 2:50pm <i>Restricted to BSCI-CHEM-BCHM majors or UMB-Nursing students (major code 12031).</i>	Seats (Total: 20) PHY 1219

0926	Katerina Thompson M 2:00pm - 3:50pm <i>Restricted to BioFIRE students.</i>	Seats (Total: 20) JMZ 0118
0927	Shreya Singh Tu 2:00pm - 3:50pm <i>Restricted for BioFire students.</i>	Seats (Total: 20) JMZ 2125
1101	Gregory Weaver Tu 9:30am - 10:45am <i>Restricted to ARCH majors only; cannot be dropped without permission from college.</i>	Seats (Total: 18) ARC 1123
1103	Gregory Weaver Tu 11:00am - 12:15pm <i>Restricted to ARCH majors only; cannot be dropped without permission from college.</i>	Seats (Total: 18) ARC 1127
1201	Taylor Sanders Th 9:30am - 10:45am <i>Restricted to SPHL majors only; cannot be dropped without permission from college.</i>	Seats (Total: 18) SPH 0308
1202	Felicia Low Tu 9:30am - 10:45am <i>Restricted to SPHL majors only; cannot be dropped without permission from college.</i>	Seats (Total: 18) SPH 0227
1203	Renee Stokes Th 9:30am - 10:45am <i>Restricted to SPHL majors only; cannot be dropped without permission from college.</i>	Seats (Total: 18) SPH 0227
1204	Lindsey Winter W 1:00pm - 2:15pm <i>Restricted to SPHL majors only; cannot be dropped without permission from college.</i>	Seats (Total: 18) HBK 0125
1205	Erin Caporellie Th 2:00pm - 3:15pm <i>Restricted to SPHL majors only; cannot be dropped without permission from college.</i>	Seats (Total: 18) SPH 0227
1206	Amy Lintner W 11:00am - 12:15pm <i>Restricted to SPHL majors only; cannot be dropped without permission from college.</i>	Seats (Total: 18) SPH 0227

1207	Kendyl Oliver Tu 9:30am - 10:45am <i>Restricted to SPHL majors only; cannot be dropped without permission from college.</i>	Seats (Total: 18) JMP 2202
1208	Matthew Wootten M 3:00pm - 4:15pm <i>Restricted to SPHL majors only; cannot be dropped without permission from college.</i>	Seats (Total: 18) PLS 1146
1501	Heather Buchanan Th 2:00pm - 3:50pm <i>Restricted to College of Agriculture and Natural Resources, First Year or Transfer Students.</i>	Seats (Total: 20) HBK 0123
FC01	Valerie Goubeau M 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) JMZ 0118
FC02	Tori Darby M 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) PLS 1111
FC03	Anne Baum F 10:00am - 11:15am <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) ESJ 2309
FC04	Steven Young F 1:00pm - 2:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) HBK 0103
FC05	Briana O'Neal W 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) PLS 1111
FC06	Randall Phyll W 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) JMZ 1124

FC07	Rebecca Caro Th 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) PLS 1115
FC08	Marchelle Payne-Gassaway M 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) PLS 1146
FC09	Hilary Sazama F 11:30am - 12:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) PLS 1111
FC10	Kenneth Kokason F 11:30am - 12:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) HBK 0105
FC11	Kendyl Oliver F 1:00pm - 2:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) PLS 1146
FC12	Victoria Shay M 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) BPS 1232
FC13	Steven Young M 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) BPS 0283
FC14	Denise McHugh Th 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) EDU 3315
FC15	TC Lloyd F 11:30am - 12:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) TWS 1313
FC16	Lauren Norris F 10:00am - 11:15am <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) TWS 1313

FC17	Alison Barlow Tu 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) PLS 1115
FC19	Mariah Bauer F 1:00pm - 2:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) PLS 1111
FC20	Kimberly Bethke Tu 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) JMZ 1124
FC21	Eric Johnson Th 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) PLS 1111
FC22	Fabian Faccio Th 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) PLS 1111
FC23	Lenaya Stewart Th 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) HBK 0105
FC24	Jamie Stednitz Tu 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) ASY 3219
FC25	Lori Kader F 11:30am - 12:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) PLS 1119
FC26	Lori Kader Tu 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) BPS 1238
FC27	Amanda Bachert Th 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) JMZ 0120

FC28	Veronica Perrigan F 11:30am - 12:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) PLS 1117
FC29	Erik Hanson Tu 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) JMZ 1120
FC30	Iceney Williams Tu 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) PLS 1115
FC31	Sharon Vanwright F 11:30am - 12:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) TWS 1321
FC32	Lenaya Stewart Th 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) HBK 0103
FC33	Victoria Shay Tu 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) HBK 1108
FC34	Matthew Sinclair Tu 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) MTH B0423
FC35	Ebony Fullwood F 11:30am - 12:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) ASY 3215
FC36	Elizabeth Hinson M 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) ASY 3215
FC37	Anne Baum Th 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) ESJ 2309

FC38	Felicia Low Tu 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) HBK 0103
FC39	Emily Biery F 10:00am - 11:15am <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) HBK 0105
FC40	Candace Daniels W 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) KNI 1103
FC41	Thomas Steen Tu 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) PLS 1115
FC42	Katie O'Mailey Tu 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) JMZ 3203
FC43	Zabrina Anzyl F 1:00pm - 2:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) SPH 1302
FC44	Melanie Ashton Tu 3:00pm - 4:15pm <i>Restricted to students in Freshman Connection.</i>	Seats (Total: 18) EDU 1315
FC45	Lindsey Winter W 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) WDS 0104
FC47	Jamie Stednitz Tu 4:30pm - 5:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) ASY 3219
FC49	Ashleigh Brown Tu 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) BPS 1234

FC50	Rajan Parikh Tu 3:00pm - 4:15pm	Seats (Total: 18) MTH 0307
FC51	Olive Reid Tu 6:00pm - 7:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) JMZ 0122
FC52	Kristin LaRiviere F 10:00am - 11:15am <i>Restricted to students in Freshmen Connection</i>	Seats (Total: 18) ASY 3207
FC53	Jessica Senasack M 3:00pm - 4:15pm	Seats (Total: 18) SQH 2120
FC56	Andrew Muir W 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) SQH 1107
FC57	Amy Lintner W 7:30pm - 8:45pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) JMZ 2123
FC59	Lauren Neimeyer M 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) HBK 1112
FC60	Elizabeth Wasden Tu 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) SPH 0305
FC62	Leslie Davis Tu 3:00pm - 4:15pm <i>Restricted to students in Freshmen Connection.</i>	Seats (Total: 18) MTH 0101

UNIV100V

The Student in the University

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: EDCP108O or UNIV100. Formerly: EDCP108O.

Introduces students to University life. In a small classroom setting, students will explore how to successfully bridge the gap between high school and college. Study skills, career decision-making, and student development processes will be explored.

0101	Tasha Vanterpool	Seats (Total: 25)
	M 3:30pm - 5:30pm	Location: TBA
<i>This section is reserved for VETERANS ONLY. DD214 required for verification.</i>		

UNIV106 The Transfer Student in the University

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Must be a first-semester Letters and Sciences transfer student. Credit only granted for: UNIV106 or EDCP108G.

For transfer students in Letters and Sciences. This course is designed to assist students in making a successful transition to the University of Maryland (UMD) and to serve as an extended orientation to campus living and learning.

0101	Melissa Hyre	Seats (Total: 20)
	Tu 11:00am - 12:15pm	WDS 0104
0201	Jeffrey Kodis	Seats (Total: 20)
	Th 2:00pm - 3:15pm	ASY 3217
0301	JV Sapinoso	Seats (Total: 20)
	W 3:00pm - 4:15pm	BPS 1236

UNIV108 Business Exploration Series Colloquium

Credits: 1 Grading Method: Regular

For students interested in pursuing a business career. Students learn the fundamentals of career development and what the internship/job search process entails.

For students interested in pursuing a business career. Students learn the fundamentals of career development and what the internship/job search process entails.

FC01	Lisa Scheeler, Iceney Williams	Seats (Total: 21)
	Th 6:00pm - 6:50pm	ASY 2203
	Tu 6:00pm - 6:50pm	JMZ 1117 Discussion
<i>Restricted to students in Freshmen Connection.</i>		

FC02	Lisa Scheeler, Jeffrey Kodis	Seats (Total: 21)	
	Th 6:00pm - 6:50pm	ASY 2203	
	Tu 6:00pm - 6:50pm	JMZ 1120	Discussion
<i>Restricted to students in Freshmen Connection.</i>			
FC04	Lisa Scheeler, Iceney Williams	Seats (Total: 21)	
	Th 6:00pm - 6:50pm	ASY 2203	
	F 1:30pm - 2:20pm	PLS 1164	Discussion
<i>Restricted to students in Freshmen Connection.</i>			

UNIV269

Connecting Across Cultures

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit General Education: DVCC

An examination of culture to guide study abroad students through the stages of cross cultural adjustment and to promote cultural competency by providing the motivation, knowledge and skills necessary to work with diverse individuals and teams.

Contact department for information to register for this course.

UNIV269A

Connecting Across Cultures; Cultural Realities of Spain

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit General Education: DVCC

An examination of culture to guide study abroad students through the stages of cross cultural adjustment and to promote cultural competency by providing the motivation, knowledge and skills necessary to work with diverse individuals and teams.

Contact department for information to register for this course.

UNIV389A

(Perm req)

Special Topics in Undergraduate Studies; Army ROTC Independent Study Projects

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Courses will focus on interdisciplinary topics and will be planned in cooperation with Undergraduate Studies.

0101	James Choi, Marisa Pace, Ashley Miller	Seats (Total: 20)
Contact instructor or department for details.		
0102	Ashley Miller, James Choi	Seats (Total: 20)
Contact instructor or department for details.		

0103	Marisa Pace	Seats (Total: 20)
Contact instructor or department for details.		

UNIV389J

Special Topics in Undergraduate Studies; Federal Independent Study Projects

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Courses will focus on interdisciplinary topics and will be planned in cooperation with Undergraduate Studies.

Prerequisite: Permission of instructor.

0101	Joan Burton	Seats (Total: 25)
Contact instructor or department for details.		
0201	Joan Burton	Seats (Total: 25)
Contact instructor or department for details.		

UNIV399

Experiential Learning in Undergraduate Studies

(Perm req)

Credits: 1-3 Grading Method: Regular

Experiential learning offered in conjunction with certain designated Office of Undergraduate Studies programs.

0201	Joan Burton	Seats (Total: 10)
Contact instructor or department for details.		

URSP

Urban Studies and Planning

Fall 2019

URSP250

The Sustainable City: Exploring Opportunities and Challenges

Credits: 3 Grading Method: Regular, CORE: IE General Education: DSSP,
Pass-Fail, Audit SCIS

An exploration, through an interdisciplinary approach, of a number of issues related to making cities more sustainable in terms of environmental protection, economic opportunity, and social justice. The course assist students to develop skills in critical analysis and systems thinking and to use those skills in analyzing sustainability related problems and potential solutions, and to expand students' understanding of the political implications of crafting and moving towards a sustainable urban future.

0101	Marccus Hendricks	Seats (Total: 32)
	Tu 9:30am - 10:45am	CCC 1100
	Th 9:30am - 10:45am	CCC 1100 Discussion

0102	Marccus Hendricks	Seats (Total: 32)	
	Tu 9:30am - 10:45am	CCC 1100	
	Th 9:30am - 10:45am	CCC 1100	Discussion
0103	Marccus Hendricks	Seats (Total: 32)	
	Tu 9:30am - 10:45am	CCC 1100	
	Th 9:30am - 10:45am	CCC 1100	Discussion

URSP399I

Independent Study

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Directed research and study of selected aspects of urban affairs.

Contact department for information to register for this course.

URSP601

Research Methods

Credits: 3 Grading Method: Regular,
Audit

*Recommended: An undergraduate-level statistics course; and familiarity with Microsoft Excel.
Formerly: URBS601.*

Use of measurement, statistics, quantitative analysis, and micro-computers in urban studies and planning.

0101	Casey Dawkins	Seats (Total: 15)	
	W 7:00pm - 9:40pm	ARC 1115	

URSP603

Land Use Planning: Concepts and Techniques

Credits: 3 Grading Method: Regular,
Audit

Credit only granted for: URSP603, URBS680, or URBS603. Formerly: URBS603.

Land use concepts and definitions: legal context for planning; markets and planning; planning for housing; community services, employment, utilities, and transportation; zoning; subdivision regulations; growth management; plan implementation.

0101	Arnold Keller	Seats (Total: 20)	
	Th 4:00pm - 6:40pm	ARC 1105	

URSP605

Planning History and Theory

Credits: 3 Grading Method: Regular,
Audit

Examination of key, selected major events and issues in U.S. planning history and the development of the [planning profession; exploration of major themes in planning theory and practical applications of them; and analysis of the relationship of history and theory.

0101	Ariel Bierbaum	Seats (Total: 25)
	Tu 4:00pm - 6:40pm	ARC 1119

URSP606 Planning Economics

Credits: 3 Grading Method: Regular

Restriction: Must not have completed URSP630. Credit only granted for: URSP606, URBS606, or URBS630. Formerly: URBS606.

Resource allocation in a market economy, the nature of market failures, and the justifications for public sector intervention. The limits and possibilities for planning in a market economy.

0101	Chengri Ding	Seats (Total: 15)
	M 4:00pm - 6:30pm	ARC 1119

URSP688L Recent Developments in Urban Studies; Planning Technology

Credits: 3 Grading Method: Regular,
Audit

Examination of selected current aspects of urban affairs and planning, including, for example, in the United States or neighborhood preservation in Russia. Location of course may be off-campus.

An introduction to technologies that are vital for contemporary planners. With a strong emphasis on practical skills, the course will provide students with fundamental concepts, hands-on experience and real-world applications of such urban planning technologies as web publishing and tools, search engine optimization, blogs, Twitter and social networking, Geographic Information Systems (GIS), data visualization, 3D modeling, mash-ups, digital design tools, web surveys, photo/video sharing (web/video conferencing), and crowdsourcing

0101	Andrew McMillan	Seats (Total: 20)
	M 7:00pm - 9:40pm	ARC 0111

URSP688N Recent Developments in Urban Studies; Urban Transportation Planning and Policy

Credits: 3 Grading Method: Regular,
Audit

Examination of selected current aspects of urban affairs and planning, including, for example, in the United States or neighborhood preservation in Russia. Location of course may be off-campus.

0101	Hiroyuki Iseki	Seats (Total: 15)
	W 4:00pm - 6:40pm	ARC 1115

URSP688P Recent Developments in Urban Studies; Preserving Community Value of Ethnically Diverse Retail Centers

(Perm req)

Credits: 3 Grading Method: Regular,
 Audit

Examination of selected current aspects of urban affairs and planning, including, for example, in the United States or neighborhood preservation in Russia. Location of course may be off-campus.

Building on the previous retail trends study, students enrolled in this course will identify how to preserve and enhance the value of these ethnic retail centers and how to support equitable access to their diverse mix of retail goods and services. Many centers face pressures for change and redevelopment. As such, the study will first provide an overview of the geographic distribution of the County's ethnic retail clusters, a history of their growth and development, the communities they serve, and the social value they contribute. The study will then focus on the well-established ethnic retail clusters in Montgomery County to identify successes and challenges to develop targeted strategies that consider the impact of planned development such as the Purple Line.

0101	Bobby Boone	Seats (Total: 19)
	M 4:00pm - 6:40pm	ARC 1117

URSP688Z Recent Developments in Urban Studies; Planning & Design in the Multicultural Metropolis

Credits: 3 Grading Method: Regular,
 Audit

Examination of selected current aspects of urban affairs and planning, including, for example, in the United States or neighborhood preservation in Russia. Location of course may be off-campus.

0101	Brittany Wong, Nohely Alvarez	Seats (Total: 20)
	W 4:00pm - 6:40pm	ARC 1119

URSP708 Community Planning Studio

Credits: 6 Grading Method: Regular,
 Audit

The Community Planning Studio is a "capstone" course intended to provide students with an opportunity to apply their knowledge and skills to analyze current, pressing planning issues, in a selected community and to produce a report containing recommendations for addressing those issues. In essence, students act as a consulting team for a community client.

0101	Pamela Lebeaux	Seats (Total: 12)
	Tu 7:00pm - 9:40pm	ARC 1119
	Th 7:00pm - 9:40pm	ARC 1119

URSP709

Field Instruction

Credits: 3 Grading Method: Regular,
Audit

Students will satisfy a 300-hour internship (20 hours for 15 weeks during the spring, 25 hours a week for 12 weeks during the summer). Suitable internships are approved by the Internship Coordinator or Instructor; they involve a significant amount of planning work (preferably in the student's area of interest) and provide an appropriate on-site supervisor. The Internship Coordinator will assist students in finding a suitable internship, but the ultimate responsibility rests with each student. Whether the internship is paid or not is a matter to be worked out between the student and the organization.

0101	Casey Dawkins	Seats (Total: 20)
	Contact instructor or department for details.	
0102	Ariel Bierbaum	Seats (Total: 5)
	Contact instructor or department for details.	
1001	Gerrit Knaap	Seats (Total: 20)
	Contact instructor or department for details.	
1201	Chengri Ding	Seats (Total: 20)
	Contact instructor or department for details.	
1401	Marccus Hendricks	Seats (Total: 20)
	Contact instructor or department for details.	
1501	Ariel Bierbaum	Seats (Total: 20)
	Contact instructor or department for details.	
1601	Hiroyuki Iseki	Seats (Total: 20)
	Contact instructor or department for details.	
1701	Casey Dawkins	Seats (Total: 20)
	Contact instructor or department for details.	

2103	Willow Lung Amam	Seats (Total: 20)
Contact instructor or department for details.		

URSP710 Research Seminar: Urban Theory and Issues

Credits: 3 Grading Method: Regular,
 Audit

Prerequisite: 15 credits in URSP courses. Restriction: Must be in Urban and Regional Planning and Design (Doctoral) program. Formerly: URBS710.

An advanced research seminar for M.A. and M.C.P. students preparing their final research projects.

0101	Instructor: TBA	Seats (Total: 10)
Contact instructor or department for details.		

URSP788 Independent Study in Urban Studies and Planning

(Perm req)

Credits: 1-3 Grading Method: Regular,
 Audit

Directed research and study of selected aspects of urban affairs.

Contact department for information to register for this course.

URSP798 Readings in Urban Studies and Planning

(Perm req)

Credits: 1-3 Grading Method: Regular,
 Audit

Directed readings in selected aspects of urban affairs and planning.

Contact department for information to register for this course.

URSP799 Master's Thesis Research

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

URSP810 Contemporary Metropolitan Issues

Credits: 3 Grading Method: Regular,
 Audit

Restriction: Must be in Urban and Regional Planning and Design (Doctoral) program.

Introduces Ph.D. students to current metropolitan issues. Focus is on the historical development of the issue, problem definition, methodological approaches to its study, methodological dilemmas, and the ways that different conclusions are translated into policy. Topics vary from semester to semester but include such topics as the spatial mismatch hypothesis, the impact of urban design and form on travel behavior, the impact of technology on urban form, the justification for historic preservation, and sustainable development.

0101	Gerrit Knaap	Seats (Total: 10)
	M 1:00pm - 3:40pm	ARC 1119

URSP898

Pre-Candidacy Research

Credits: 1-8 Grading Method: Sat-Fail

Selected topics in Urban Studies and Planning. Topics will vary with the instructor.

Contact department for information to register for this course.

URSP899

Doctoral Dissertation Research

(Perm req)

Credits: 6 Grading Method: Sat-Fail

This course is a required course for the Ph.D program in Urban and Regional Planning and Design.

Contact department for information to register for this course.

USLT

Latina/o Studies

Fall 2019

Please visit <http://amst.umd.edu/programs/course/> for more course information.

USLT201

U.S. Latina/o Studies I: An Historical Overview to the 1960's

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SH, D

Interdisciplinary course focusing on demographics, terminology and social constructs of race, class, ethnicity, indigeneity, gender, and sexuality associated with the historical and political roots of US Latinidades. Examines the formation, evolution and adaptation of US Latina/o communities as critical field of inquiry.

0101	Robert Chester	Seats (Total: 30)
	TuTh 11:00am - 12:15pm	TWS 0134

USLT369A

Special Topics in Study Abroad III; Thinking in Andalusian: The Antonio Machado Family of Seville

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

USLT430

Globalization and the Diversifying U.S.

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Credit only granted for: USLT430, USLT498N, AMST498W, or IMMR419J. Formerly: USLT498N.

While often talked about as a recent phenomenon and one focused on capital, the ebbs and flows of globalization has a long history among Latina/o communities in the United States. The impact and consequences of globalization can be seen in US foreign policy in Latin America. For instance, Operation Bootstrap in Puerto Rico and the Maquiladores on the Mexico and U.S. border. At the same time, it has shaped immigration policies and the social, political and cultural experiences of Latina/o workers in the U.S. Often blamed for "taking " jobs, this course takes a deeper look at the concrete reasons for the rise of globalism and its impact on Latina/o communities in the US.

0101	Jacqueline Partida	Seats (Total: 30)
	MWF 10:00am - 10:50am	SQH 1107

USLT498A

US Latina/o Studies: Special Topics; Latinas/os on the Silver Screen

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Specific content to be announced when courses are offered.

Cross-listed with AMST498G. Credit granted for USLT498A or AMST498G.

0101	Robert Chester	Seats (Total: 30)
	TuTh 9:30am - 10:45am	HBK 0109

USLT498D

US Latina/o Studies: Special Topics; Central Americans and the United States: Culture, Politics, and Community

Credits: 3 Grading Method: Regular

Specific content to be announced when courses are offered.

Cross-listed with AMST498C. Credit granted for USLT498D or AMST498C.

0101	Robert Chester	Seats (Total: 25)
	TuTh 2:00pm - 3:15pm	TWS 0134

USLT498E**US Latina/o Studies: Special Topics; African American and Latino Social, Cultural and Political Relations: 1940 to Present**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Specific content to be announced when courses are offered.

Cross-listed with AASP498O. Credit granted for USLT498E or AASP498O.

0101	Jason Nichols	Seats (Total: 35)
	W 4:00pm - 6:30pm	TYD 1118

USLT498R**US Latina/o Studies: Special Topics; Revolutions and Diasporas**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Specific content to be announced when courses are offered.

Cross-listed with AMST498B. Credit granted for USLT498R or AMST498B.

0101	Nancy Mirabal	Seats (Total: 20)
	TuTh 12:30pm - 1:45pm	TWS 0134

VMSC**Veterinary Medical Sciences****Fall 2019****VMSC610****Recombinant Viral Vectors**

Credits: 3 Grading Method: Regular,
Audit

Restriction: Permission of instructor.

A comprehensive presentation of information on the molecular biology of the most relevant viral vectors developed to date and give insight on vector construction, purification and utilization. Also intended for students in virology and related fields as well as to those interested in the application of viral vectors to basic research.

0101	George Belov	Seats (Total: 10)
	Contact instructor or department for details.	

VMSC660**Emerging and Re-emerging Infectious Diseases**

Credits: 3 Grading Method: Regular

The global burden of emerging and re-emerging infectious diseases is growing and prompts the need for effective control of these pathogens. The objective of this course is to provide graduate students with knowledge of pathogenesis and transmission of globally evolving pathogens. Registered students for this course are expected to know fundamentals of infectious diseases. References from the peer reviewed journals will be provided to facilitate understanding of the selected topics. Opening of this course is necessary to help graduate students to stay up-to-date with currently emerging pathogens and their evolution with changes in environment. This course is complementary to other existing microbiology courses (i.e., Viral Pathogenesis) on campus. Lectures focus on an in-depth analysis of a variety of topics in current infectious diseases. The course highlights recently published literatures to evaluate evolving trends in infectious diseases. The covered topics include subjects related with various pathogens and their adaptation strategy to enhance pathogenicity and transmissibility. The lectures will also cover the control and prevention measures of these pathogens.

0101	Instructor: TBA	Seats (Total: 20)
	M 10:00am - 12:40pm	GVC 1131

VMSC698 Seminar in Veterinary Medical Science

Credits: 1-3 Grading Method: Regular

Presentation and discussion of scientific publications, current topics and new methodologies related to veterinary medical sciences.

Class will meet in 1216 Gudelsky Building.

0101	Sean Riley	Seats (Total: 20)
	Th 11:00am - 12:00pm	GVC 1216

VMSC699 Special Problems in Veterinary Medical Sciences

Credits: 1-4 Grading Method: Regular

Independent study of a specific problem related to veterinary medicine such as a disease outbreak, application of a new diagnostic test or a risk analysis related to animal health. Targeted at veterinary medicine (DVM) students and other graduate students with a background in veterinary medicine.

Contact department for information to register for this course.

VMSC760 Immunology of Infectious Diseases

Credits: 3 Grading Method: Regular,
Audit

An advanced graduate level course that focuses on the cutting-edge knowledge of immunity and recent research breakthroughs in the interactions between host immune system and infectious pathogen, and vaccine development

0101	Meiqing Shi	Seats (Total: 25)
	TuTh 1:45pm - 3:00pm	PLS 1115

VMSC780 Parasites of Medical and Veterinary Importance

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Permission of instructor.

Provides students with the basic knowledge of parasites as well as research advancement in important parasites of humans and animals. Particular attention will be given to parasite biology, pathogenesis, and host responses to parasitic infection. A selection of parasites of medical and veterinary importance will be specifically covered with emphasis on recent research breakthroughs in the field.

Contact department for information to register for this course.

VMSC799 Thesis Research

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

VMSC898 Pre-Candidacy Research

Credits: 1-8 Grading Method: Regular

Contact department for information to register for this course.

VMSC899 Dissertation Research

(Perm req)

Credits: 1-6 Grading Method: Regular

Contact department for information to register for this course.

WMST Women's Studies Fall 2019

WMST200 Introduction to Women's Studies: Women and Society

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: SB, D General Education: DSHS, DVUP

An interdisciplinary study of the status, roles, and experiences of women in society. Sources from a variety of fields such as literature, psychology, history, and anthropology, focusing on the writings of women.

0201	Damien Hagen	Seats (Total: 25)
	MWF 11:00am - 11:50am	PLS 1146

0301	Damien Hagen	Seats (Total: 30)
	MWF 2:00pm - 2:50pm	JMZ 3205

WMST250

Introduction to Women's Studies: Women, Art and Culture

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HA, D General Education: DSHU, DVUP

An examination of women's creative powers as expressed in selected examples of music, film, art, drama, poetry, fiction, and other literature. Explores women's creativity in relation to families, religion, education, ethnicity, class, sexuality, and within a cultural tradition shaped by women.

0201	Tangere Hoagland	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	JMZ 0125
0301	Tangere Hoagland	Seats (Total: 30)
	TuTh 9:30am - 10:45am	SYM 0215
0401	Lenora Knowles	Seats (Total: 30)
	TuTh 2:00pm - 3:15pm	SQH 2120
0501	Jocelyn Coates	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	SQH 2120
0701	Amira Lundy-Harris	Seats (Total: 25)
	MWF 11:00am - 11:50am	WDS 0104
0801	Eva Peskin, Rahma Haji	Seats (Total: 25)
	MWF 12:00pm - 12:50pm	LEF 1220
1001	Amira Lundy-Harris	Seats (Total: 30)
	MWF 9:00am - 9:50am	SQH 1121
1201	Clara Montague	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	HBK 1108
1301	Jessica Mathiason	Seats (Total: 45)
	TuTh 5:00pm - 6:15pm	KEY 0116
2001	Michelle Rowley	Seats (Total: 20)
	MW 10:00am - 10:50am	LEF 2166
	F 10:00am - 10:50am	EDU 3236 Discussion

2002	Michelle Rowley	Seats (Total: 20)	
	MW 10:00am - 10:50am	LEF 2166	
	F 10:00am - 10:50am	EDU 2101	Discussion
2003	Michelle Rowley	Seats (Total: 20)	
	MW 10:00am - 10:50am	LEF 2166	
	F 9:00am - 9:50am	EDU 3233	Discussion
2004	Michelle Rowley	Seats (Total: 20)	
	MW 10:00am - 10:50am	LEF 2166	
	F 11:00am - 11:50am	EDU 3236	Discussion
FC01	Clara Montague	Seats (Total: 23)	
	MW 7:30pm - 8:45pm	KEY 0120	
	<i>Restricted to students in Freshmen Connection.</i>		
FC02	Jocelyn Coates	Seats (Total: 23)	
	MW 3:00pm - 4:15pm	JMZ 1124	
	<i>Restricted to students in Freshmen Connection.</i>		

WMST255

Reading Women Writing

Credits: 3 Grading Method: Regular, Pass-Fail, Audit CORE: HL, D General Education: DSHU, DVUP

Cross-listed with ENGL250. Credit only granted for: ENGL250 or WMST255.

Explores literary and cultural expressions by women and their receptions within a range of historical periods and genres. Topics such as what does a woman need in order to write, what role does gender play in the production, consumption, and interpretation of texts, and to what extent do women comprise a distinct literary subculture. Interpretation of texts will be guided by feminist and gender theory, ways of reading that have emerged as important to literary studies over the last four decades.

0101	Justin Thompson	Seats (Total: 30)
	TuTh 12:30pm - 1:45pm	TWS 0236

WMST263

Introduction to Black Women's Studies

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Credit only granted for: WMST298A or AASP298I. Formerly: WMST298A.

Interdisciplinary exploration of Black women, culture and society in the United States. Drawn primarily from the social sciences and history with complementary material from literature and the arts.

Cross-listed with AASP298I.

0101	Elsa Barkley Brown	Seats (Total: 40)
	TuTh 12:30pm - 1:45pm	TYD 0111

WMST269G Special Topics in Study Abroad II; Topics on Gender Studies

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

WMST269I Special Topics in Study Abroad II; Social Problems: Women's Issues (In Indian Society)

Credits: 1-6 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

WMST269W Special Topics in Study Abroad II; Social Problems: Women's Issues Field Study

Credits: 1 Grading Method: Regular,
Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

WMST275 World Literature by Women

Credits: 3 Grading Method: Regular, CORE: HL, D General Education: DSHU,
Pass-Fail, Audit DVUP

Cross-listed with CMLT275. Credit only granted for: WMST275 or CMLT275.

Comparative study of selected works by women writers of several countries, exploring points of intersection and divergence in women's literary representations.

0201	Nabila Hijazi	Seats (Total: 30)
	MW 2:00pm - 3:15pm	TWS 0214

0301	Nahid Ahmadian	Seats (Total: 30)
	TuTh 5:00pm - 6:15pm	KEY 0125

WMST298D Women's Bodies in Contention

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	CORE: HA, D	General Education: DSHS, DVUP, SCIS
0101	Jessica Mathiason	Seats (Total: 40)	
	TuTh 11:00am - 12:15pm	TYD 2110	

WMST298L History of Sexuality in America

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	General Education: DSHS
<i>Cross-listed with: HIST213. Credit only granted for: HIST213 or WMST298L.</i>		
<i>Explores the social construction of sexualities from the first colonial settlement to the modern era in the United States. Analyzes the implications of these understandings for power relations in U.S history.</i>		
Cross-listed with HIST213. Credit only granted for: HIST213, HIST219O, or WMST298L. Formerly: HIST219O.		

0101	Clare Lyons	Seats (Total: 24)	
	MW 1:00pm - 1:50pm	SQH 1120	
	F 11:00am - 11:50am	TLF 1103	Discussion
0102	Clare Lyons	Seats (Total: 24)	
	MW 1:00pm - 1:50pm	SQH 1120	
	F 1:00pm - 1:50pm	TLF 1103	Discussion
0103	Clare Lyons	Seats (Total: 24)	
	MW 1:00pm - 1:50pm	SQH 1120	
	F 2:00pm - 2:50pm	TLF 1103	Discussion

WMST298N Special Topics in Women's Studies; Racialized Gender and Rebel Media

Credits: 3	Grading Method: Regular, Pass-Fail, Audit	General Education: DSSP
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How do different forms of media shape the stories which circulate about race, femininities, masculinities, ethnicities, sexualities, religiosity, power and difference? How have various media formats been used to disrupt dominant stories, to tell new stories, and to create differing understandings of citizenship? This course is an introduction to the interdisciplinary field of women's studies and an exploration of the ways that media has been used as a platform for racial justice, feminist activism, and cultural transformation, with a principal focus on the expressions of women of color.

0101	Ivan Ramos	Seats (Total: 30)
	TuTh 3:30pm - 4:45pm	JMZ 2122

WMST300 **Feminist Reconceptualizations of Knowledge**

(Perm req)

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Restriction: Permission of ARHU-Women's Studies department; and must be in Women's Studies program.

An examination of how the interdisciplinary study of women and gender has generated new questions, challenged traditional methodologies and offered insights on the ways we come to learn, know, and teach. Explores the impact of feminist thinking on various disciplines.

0101	Jessica Mathiason	Seats (Total: 15)
	TuTh 2:00pm - 3:15pm	WDS 2101R

WMST320 **Women in Classical Antiquity**

Credits: 3 Grading Method: Regular, , D General Education: DSHU,
Pass-Fail, Audit DVUP

Cross-listed with: CLAS320, HIST328W. Credit only granted for: CLAS320, WMST320, or HIST328W.

A study of women's image and reality in ancient Greek and Roman societies through an examination of literary, linguistic, historical, legal, and artistic evidence; special emphasis in women's role in the family, views of female sexuality, and the place of women in creative art. Readings in primary sources in translation and modern critical writings.

0101	Lillian Doherty	Seats (Total: 35)
	TuTh 9:30am - 10:45am	KEY 0126

WMST325 **The Sociology of Gender**

Credits: 3 Grading Method: Regular, , D
Pass-Fail, Audit

Prerequisite: 3 credits in SOCY courses. Cross-listed with SOCY325. Credit only granted for: SOCY325 or WMST325.

Institutional bases of gender roles and gender inequality, cultural perspectives on gender, gender socialization, feminism, and gender-role change. Emphasis on contemporary American society.

0101	Zsuzsa Daczo	Seats (Total: 60)
	MWF 2:00pm - 2:50pm	ASY 2309

WMST336 Psychology of Women

Credits: 3 Grading Method: Regular, Pass-Fail, Audit, D General Education: DSHS

Prerequisite: PSYC100. Cross-listed with PSYC336. Credit only granted for: PSYC336 or WMST336.

A study of the biology, life span development, socialization, personality, mental health, and special issues of women.

Restricted to undergraduate PSYC students or WMST students only.

0101	Monica Kearney	Seats (Total: 110)
	MW 12:00pm - 12:50pm	BPS 1250
	Class time/details on ELMs	ONLINE

WMST350 Feminist Pedagogy

(Perm req)

Credits: 6 Grading Method: Regular, Pass-Fail, Audit

Restriction: Permission of ARHU-Women's Studies department.

General application of feminist methodology to teaching and communication skills, teaching strategies, motivation, classroom dynamics and knowledge of students' development and learning styles.

Contact department for information to register for this course.

WMST369G Special Topics in Study Abroad III; Gender and Post Socialist Transformation in Central Europe

Credits: 3 Grading Method: Regular, Pass-Fail, Audit

Special topics course taken as part of an approved study abroad program.

Contact department for information to register for this course.

WMST379A Topics in Women's Studies; Honors Thesis Writing I

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Thematic exploration of a topic in women's studies.

Contact department for information to register for this course.

WMST379B

Topics in Women's Studies; Honors Thesis Writing II

(Perm req)

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Thematic exploration of a topic in women's studies.

Contact department for information to register for this course.

WMST379F

Topics in Women's Studies; Women and Comedy: History, Theory, Practice

Credits: 3

Grading Method: Regular

Thematic exploration of a topic in women's studies.

0101

Heidi Scott

Seats (Total: 30)

MWF 12:00pm - 12:50pm

KEY 0116

WMST379W

Topics in Women's Studies; Global Women in World War II

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Thematic exploration of a topic in women's studies.

Cross-listed with HIST319D. Credit granted for WMST379W or HIST319D.

0101

Dewen Zhang

Seats (Total: 30)

TuTh 9:30am - 10:45am

TLF 1103

WMST379Y

Topics in Women's Studies; Women in Chinese History

Credits: 3

Grading Method: Regular,
Pass-Fail, Audit

Thematic exploration of a topic in women's studies.

Cross-listed with HIST328Y. Credit granted for WMST379Y or HIST328Y.

0101

Dewen Zhang

Seats (Total: 30)

TuTh 12:30pm - 1:45pm

KEY 0100

WMST386**Experiential Learning**

(Perm req)

Credits: 1-6 Grading Method: Regular,
Pass-Fail

Restriction: Must have Learning Proposal approved by Women's Studies Academic Advisor; and junior standing or higher.

Contact department for information to register for this course.

WMST400**Theories of Feminism**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Prerequisite: 1 course in WMST; or must have completed a course cross-listed with a WMST course.

A study of the multiplicity of feminist theories which have been developed to explain women's position in the family, the workplace, and society. Major feminist writings are considered in the context of their historical moment and in the context of the intellectual traditions to which they relate.

0101	Sydney Lewis	Seats (Total: 30)
	TuTh 9:30am - 10:45am	ASY 3207

WMST428C**Topics in Women's Studies; Race and Reproduction**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Thematic exploration of a topic in women's studies.

Cross-listed with AASP499C AMST498E, SOCY699B and SOCY498F. Credit only granted for AASP499C, AMST498E, SOCY498F, SOCY699B or WMST428C.

0101	Sangeetha Madhavan	Seats (Total: 35)
	W 2:00pm - 4:30pm	ASY 3203

WMST428L**Topics in Women's Studies; 21st Century Black Feminisms**

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Thematic exploration of a topic in women's studies.

Cross-listed with AASP498C. Credit only granted for WMST428L or AASP498C . Built loosely around Dr. Brittney Cooper's 2018 Black feminist manifesto *Eloquent Rage* this course looks at black women's anger as a generative force for social change. Through reading Cooper's book and the intersectional black feminists texts that inspired it, this course will explore black women's sexuality and family life, black popular culture, black women's politics, black women's bodily autonomy, and the simmering rage which undergirds many black women's experiences in the United States.

0101	Sydney Lewis	Seats (Total: 30)
	Th 4:00pm - 6:30pm	JMZ 0103

WMST448A Literature by Women of Color; CARRIBEAN LITERATURE BY WOMEN

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Literature by women of color in the United States, Britain, and in colonial and post-colonial countries.

Prerequisite: two English courses in literature or permission of department. Repeatable to 9 credits, if content differs. Also offered as ENGL448A and LASC448A. Credit only offered for ENGL448A, LASC448A or WMST448A.

0101	Merle Collins	Seats (Total: 25)
	TuTh 11:00am - 12:15pm	TWS 0221

WMST452 Women in the Media

Credits: 3 Grading Method: Regular, , D General Education: DVUP
Pass-Fail, Audit

Cross-listed with JOUR452. Credit only granted for: JOUR452 or WMST452.

Participation and portrayal of women in the mass media from colonial to contemporary times.

0101	Renee Poussaint	Seats (Total: 30)
	TuTh 4:00pm - 5:15pm	KNI 3202

WMST488E Senior Seminar; Girlhood: A Transnational History

(Perm req)

Credits: 3 Grading Method: Regular

Seminar for advanced majors in women's studies or other students with appropriate preparation. Interdisciplinary topics will vary each semester.

How are girls distinguished from women? This course is about why and how this question has been answered in varying ways over the past two and a half centuries. We will delve into the distinctions drawn between girls and women across the globe (including the United States). We will engage with historical material about health, medicine, law, religion, visual and popular culture. In particular, we will think about how girlhood is imagined in idealized ways, and ask which girls have access to, or are denied, idealized girlhood.

0101	Ashwini Tambe	Seats (Total: 15)
	F 11:00am - 1:30pm	ARC 1127

WMST498A Advanced Special Topics in Women's Studies; Community Interventions: Domestic Violence

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

0101	Karen O'Brien	Seats (Total: 35)
	MW 8:00am - 9:15am	PLS 1111

WMST498L Advanced Special Topics in Women's Studies; Women in Israel

Credits: 3 Grading Method: Regular,
Pass-Fail, Audit

Contact department for information to register for this course.

WMST498Y Advanced Special Topics in Women's Studies; Dickinson, Whitman, Erotics, and American Poetry

Credits: 3 Grading Method: Regular, General Education: DSHS,
Pass-Fail, Audit DVUP

Cross-listed with ENGL439D and LGBT448Y. Credit granted for ENGL439D, LGBT448Y, or WMST498Y.

0101	Martha Nell Smith	Seats (Total: 17)
	TuTh 2:00pm - 3:15pm	TWS 0201

WMST499 Independent Study

(Perm req)

Credits: 1-3 Grading Method: Regular,
Pass-Fail

Research and writing or specific readings on a topic selected by the student and supervised by a faculty member of the Women's Studies Department.

Contact department for information to register for this course.

Approaches to Women's Studies I

Credits: 3 Grading Method: Regular, Audit

Examines two fundamental concepts in women's studies: intersectionality and interdisciplinarity. Looks at how feminisms have shaped and been shaped by knowledge-production within and across disciplinary boundaries, cultures, and paradigms. Develops an appreciation of intersectional theory as a critical research tool and as a set of responses to issues of power, domination, oppression and other loci of difference.

0101	Alexis Lothian	Seats (Total: 12)
	Th 6:00pm - 8:30pm	WDS 2101R

Feminist Pedagogy

Credits: 3 Grading Method: Regular

Prerequisite: permission of department. For WMST major only.

0101	Michelle Rowley	Seats (Total: 4)
	Contact instructor or department for details.	

Women's Studies Teaching Practicum

Credits: 1 Grading Method: Regular

Prerequisite: permission of department. For WMST majors only.

0101	Ruth Zambrana	Seats (Total: 10)
Contact instructor or department for details.		

Women's Studies Colloquium

Credits: 1 Grading Method: Sat-Fail

An intensive advanced exploration of current problems and issues in women's studies.

0101

Alexis Lothian

Seats (Total: 18)

Contact instructor or department for details.

WMST699

Independent Study

(Perm req)

Credits: 1-3

Grading Method: Regular,
Audit

Research and writing on specific readings on a topic selected by the student which is approved and supervised by a faculty member of the Women's Studies Department.

Contact department for information to register for this course.

WMST709

Directed Independent Reading for Major Field Exam

(Perm req)

Credits: 1-4

Grading Method: Sat-Fail

Directed reading in preparation for Major Field Exam. In consultation with their advisors, students identify, analyze, critique and synthesize material relevant to their major fields of inquiry. Grading will be based on combinations of oral performance in the bi-weekly meetings, production of annotated bibliographies and synthetic papers.

Contact department for information to register for this course.

WMST799

Masters Thesis Research

(Perm req)

Credits: 1-6

Grading Method: Regular

Contact department for information to register for this course.

WMST898

Pre-Candidacy Research

(Perm req)

Credits: 1-8

Grading Method: Regular, Sat-
Fail

Contact department for information to register for this course.

WMST899

Doctoral Dissertation Research

(Perm req)

Credits: 6

Grading Method: Regular

Contact department for information to register for this course.
